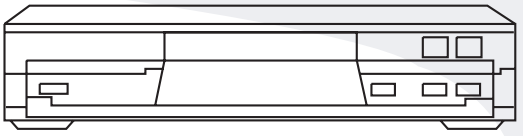
TOSHIBA

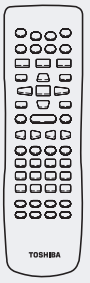
FILE NO. 810-200310X

SERVICE MANUAL

DVD HOME THEATER SYSTEM

SD-43HKSB
SD-43HKSE





April. 2003

LASER BEAM CAUTION LABEL

CAUTION
VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN. DO NOT STARE INTO BEAM OR VIEW DIRECTLY WITH OPTICAL INSTRUMENTS.
ATTENTION
RAYONNEMENT VISIBLE ET INVISIBLE LASER EN CAS D'OUVERTURE. NE PAS REGARDER DANS LE FAISCEAU, NI A L'OEIL NU NI A L'AIDE D'INSTRUMENTS D'OPTIQUE.
VORSICHT
SICHTBARE UND UNSICHTBARE LASERSTRAHLUNG WENN ABDECKUNG GEÖFFNET. NICHT IN DEN STRAHL BLICKEN AUCH NICHT MIT OPTISCHEN INSTRUMENTEN.
注意
ADVARSEL
SYNLIG OG USYNLIG LASERSTRÅLING VED ÅBNING. SE IKKE IND I STRÅLEN HELLER IKKE MED OPTISKE INSTRUMENTER.
ADVARSEL
SYNLIG OG USYNLIG LASERSTRÅLING NÅR DEKSEL ÅPNES. STIRR IKKE INN I STRÅLEN ELLER SE DIREKTE MED OPTISKE INSTRUMENTR.
VARO!
AVATTAESSA OLET ALTTIINA. NÄKYVÄÄ JA NÄKYMÄTÖN LASERSÄTEILYLLE. ÄLÄ TUIJOTA SÄTEESEEN ÄLÄKÄ KATSO SITÄ OPTIIKEN LAITTEEN LÄPI.
VARNING
SYNLIG OCH OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD. STIRRA EJ IN I STRÅLEN OCH BETRAKTA EJ STRÅLEN MED OPTISKA INSTRUMENT.
98704188

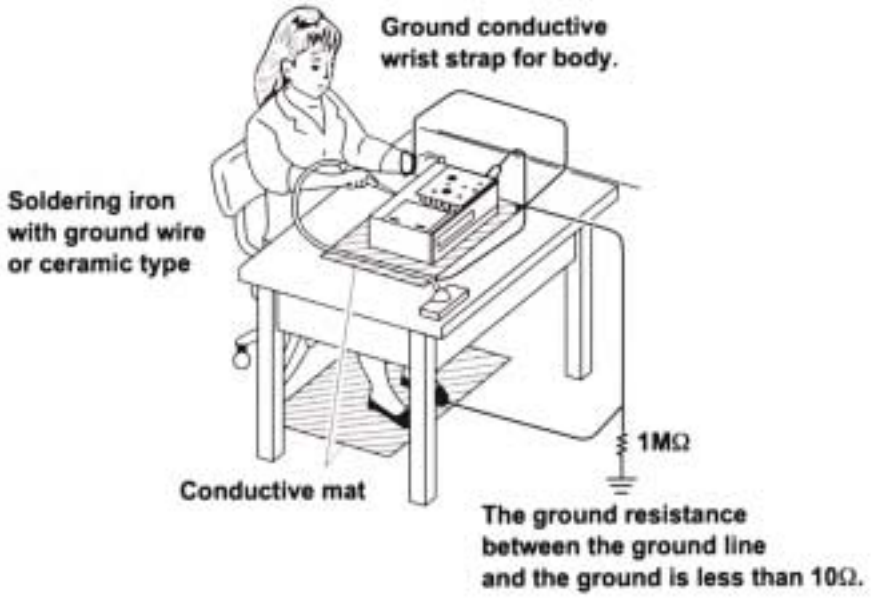
When the power supply is being turned on, you may not remove this laser cautions label. If it removes, radiation of a laser may be recceived.

PREPARATION OF SERVICING

Pickup Head consists of a laser diode that is very susceptible to external static electricity.

Although it operates properly after replacement, if it was subject to electrostatic discharge during replacement, its life might be shortened. When replacing, use a conductive mat, soldering iron with ground wire, etc. to protect the laser diode from damage by static electricity.

And also, the LSI and IC are same as above.


Ground conductive wrist strap for body.
Soldering iron with ground wire or ceramic type
1MΩ
Conductive mat
The ground resistance between the ground line and the ground is less than 10Ω.

SAFETY NOTICE

SAFETY PRECAUTIONS

LEAKAGE CURRENT CHECK

Plug the AC line cord directly into a 120V AC outlet (do not use an isolation transformer for this check). Use an AC voltmeter, having 5000 Ω per volt or more sensitivity.

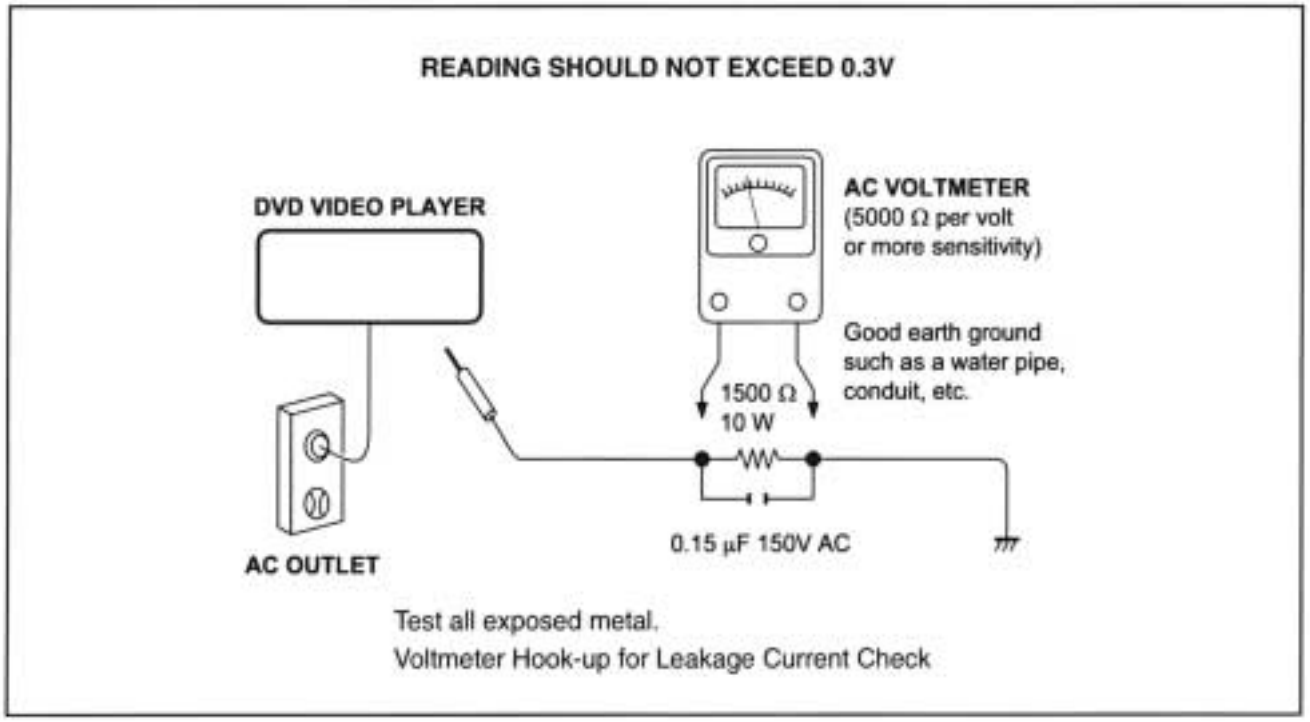
Connect a 1500 Ω 10 W resistor, paralleled by a 0.15 µF 150V AC capacitor between a known good earth ground (water pipe, conduit, etc.) and all exposed metal parts of cabinet (antennas, handle bracket, metal cabinet screwheads, metal overlays, control shafts, etc.).

Measure the AC voltage across the 1500 Ω resistor.

The test must be conducted with the AC switch on and then repeated with the AC switch off. The AC voltage indicated by the meter may not exceed 0.3 V. A reading exceeding 0.3 V indicates that a dangerous potential exists, the fault must be located and corrected.

Repeat the above test with the DVD VIDEO PLAYER power plug reversed.

NEVER RETURN A DVD VIDEO PLAYER TO THE CUSTOMER WITHOUT TAKING NECESSARY CORRECTIVE ACTION.



Test all exposed metal.
Voltmeter Hook-up for Leakage Current Check

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

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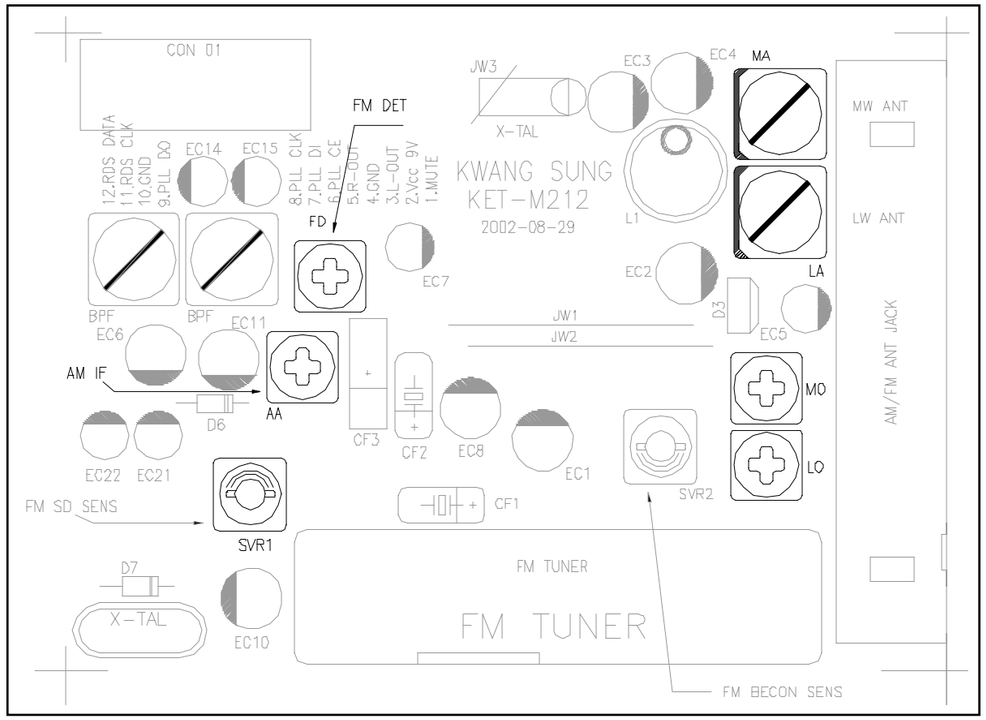
10. Troubleshooting

1. Alignment and Adjustments

1-1. Tuner



* Adjustment Location of Tuner PCB

ITEM	AM(MW) OSC Adjustment	AM(MW) RF Adjustment
Received FREQ.	522~1611 KHz	594 KHz
Adjustment point	MO	MA
Output	1~7.0±0.5V	Maximum Output(Fig1-4)

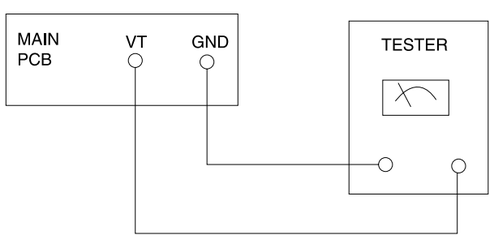


Fig 1-4 OSC Voltage

FM THD Adjustment	
SSG FREQ.	98 MHz
Adjustment point (FM DET)	FM DETECTOR COIL
Output	60 dB
Minumum Distortion (0.4% below) (Figure 1-1)	

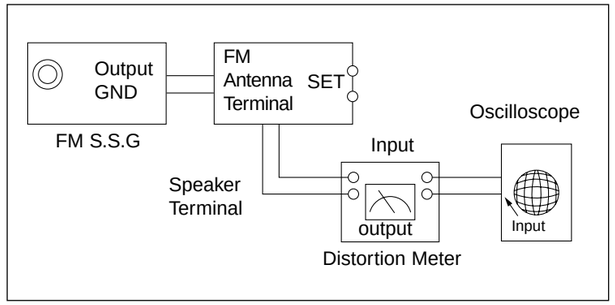


Figure1-1 IF CENTER and THD Adjustment

FM Search Level Adjustment	
SSG FREQ.	98 MHz
Adjustment point (SVR1)	BEACON SENSITIVITY SEMI-VR(10KΩ)
Output	28 dB(±2dB)
Adjust SVR1 (Figure 1-2)	

*Adjust FM S.S.G level to 28dB

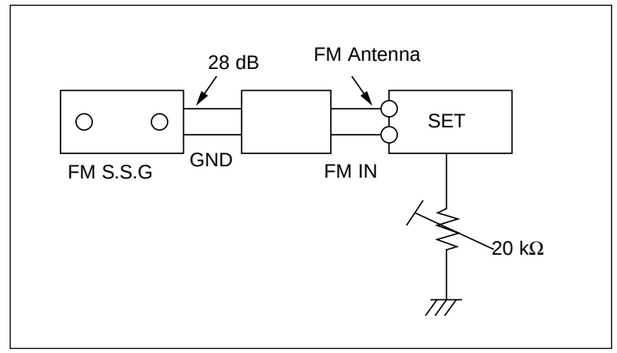


Figure1-2 FM Auto Search Level Adjustment

AM(MW) I.F Adjustment	
SSG FREQ.	450 kHz
Frequency	522 kHz
Adjustment point	AM IF
Maximum output (Figure 1-3)	

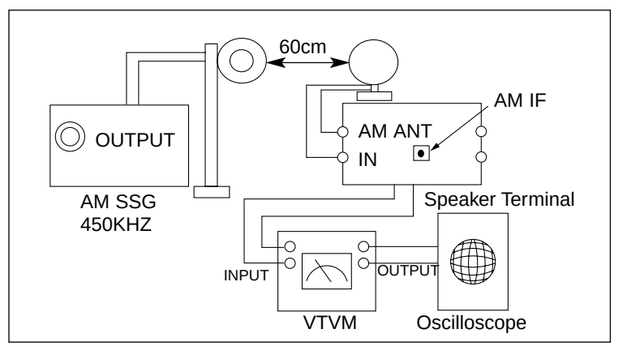


Figure1-3 AM I.F Adjustment

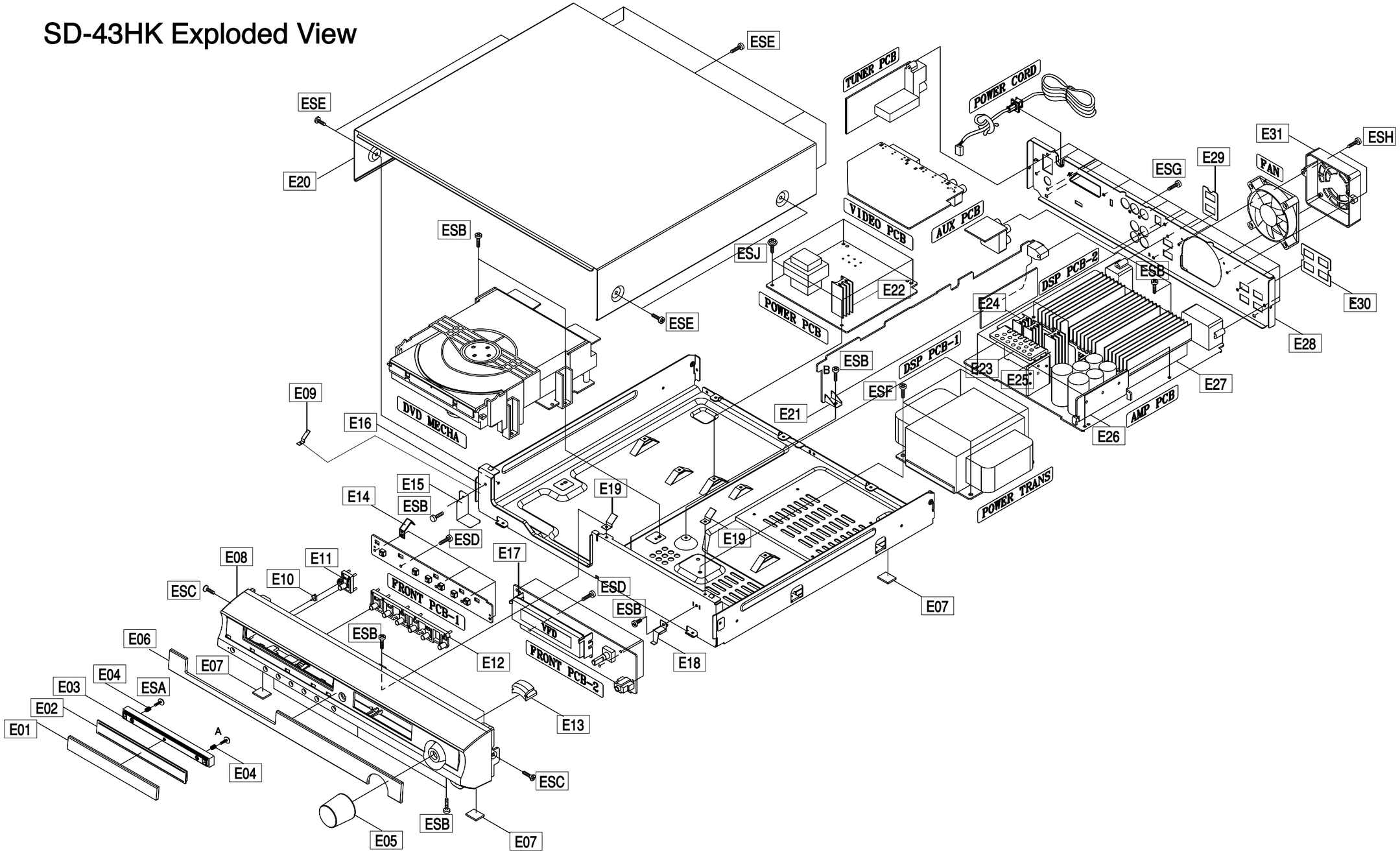
1-1-2 AM(MW),SW1,SW2 Adjustment

	Circuit to be Adjusted	Measuring Instrument & Arrangement	Step	S.S.G Frequency	Radio dial Setting	Adjusting Point	Adjust for
AM (MW)	OSC	Connect AM signal generator to loop antenna,VTVM AND oscilloscope (Fig 1-3)	1	522KHz	522KHz	MW OSC	Adjust for 1.0V±0.1V at the low. (IR117)
			2	1611KHz	1611KHz	MW OSC	Check for 7.0V±1.0V at the high. (IR117)
	RF	"	1	594KHz	594KHz	MW ANT	Maximum out
	INTER FREQ	"	1	455KHz	522KHz	TL2	Maximum out
SW1	OSC	Fig 1-3	1		2.3MHz	SW1 OSC	Adjust for 1.0V±0.1V at the low.
			2		7.3MHz	-	Check for 8.5V±1.0V at the high.
	RF		1	3.5MHz	3.5MHz	SW1 ANT	Maximum out
SW2	OSC	Fig 1-3	1		9.5MHz	SW2 OSC	Adjust for 1.5V±0.1V at the low.
			2		26.1MHz	-	Check for 8.0V±1.0V at the high.
	RF		1	10MHz	10MHz	SW2 ANT	Maximum out

2.Exploded Views and Parts List

2-1 Total Exploded View

SD-43HK Exploded View

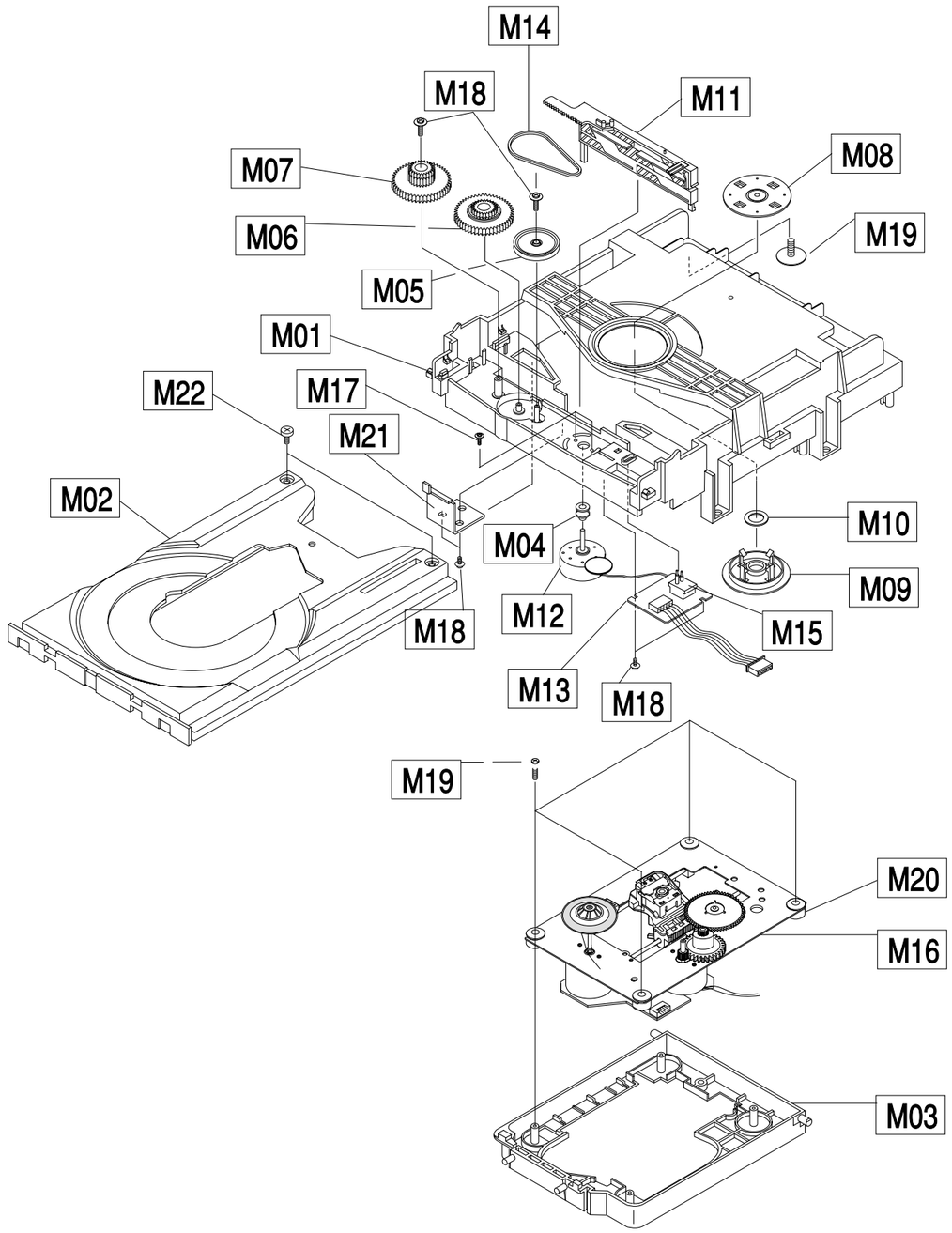


*** Parts List of Total Exploded view**

No.	TOSHIBA P/N	Samsung Code No.	Description & Specification	Q'ty	REMARK
E01	AG000426	AH64-02409A	WINDOW-CD DOOR, ACRYL 3.0T	1	
E02	AG000422	AH64-02405B	DOOR-CD, ABS GRAY	1	
E03	AG000397	AH61-01323B	HOLDER-DOOR CD, ABS GRAY+GLASS 20%	1	
E04	AG000398	AH61-01325A	SPRING-DOOR CD, SUS304	2	
E05	AG000425	AH64-02408B	KNOB-VOLUME, ABS NATURAL	1	
E06	AG000542	AH64-02410B	WINDOW-VFD, ACRYL 3.0T	1	
E07	AG000454	AH73-00005A	CUSHON-FOOT, EVA 2.0T	4	
E08	AG000541	AH64-02404C	CABINET-FRONT, MIPS GRAY	1	
E09	AG000537	AH63-00388N	BRKT-GND, PBS 0.2T	1	
E10	AG000438	AH67-00218A	LENS-POWER, PMMA MILKY	1	
E11	AG000424	AH64-02407B	KNOB-POWER, ABS GRAY	1	
E12	AG000423	AH64-02406B	KNOB-MAIN, ABS CLEAR	1	
E13	AG000439	AH67-00219A	LENS-VOLUME, PMMA MILKY	1	
E14	AG000538	AH63-00388Q	SHIELD-PCB,PBS 0.3T	1	
E15	AG000399	AH61-01374B	BRKT-GND, SECC 0.6T	1	
E16	AG000418	AH64-01999A	CABINET-BOTTOM, SECC 1.0T	1	
E17	AG000395	AH61-01131A	HOLDER-VFD, ABS BLK	1	
E18	AG000568	AH63-00388R	SHIELD-PCB, PBS 0.3T	1	
E19	AG000411	AH63-00388C	SHIELD-TOP, PBS 0.3T	2	
E20	AG000419	AH64-02001D	CABINET-TOP, SECC 0.8T	1	
E21	AG000396	AH61-01140A	BRKT-PCB, SPTE 0.5T	1	
E22	AG000405	AH62-30062A	HEAT-SINK.TR, AL EXTR	1	
E23	AG000403	AH62-00083A	HEAT-SINK.DVDP, AL EXTR	1	
E24	AG000401	AH62-00062A	HEAT-SINK.TR. AL EXTR	2	
E25	AG000404	AH62-30061C	HEAT-SINK.TR, AL EXTR	1	
E26	AG000535	AH62-00052D	HEAT-SINK.DIO, AL EXTR	1	
E27	AG000402	AH62-00082A	HEAT-SINK.F, AL EXTR	3	
E28	AG000540	AH64-02403C	CABINET-REAR, SECC 0.8T	1	
E29	AG000414	AH63-00569A	SHEET-SPK R, PVC 0.3T	1	
E30	AG000415	AH63-00569B	SHEET-SPK FCW, PVC 0.3T	1	
E31	AG000539	AH63-00614A	COVER-FAN, MIPS GRAY	1	

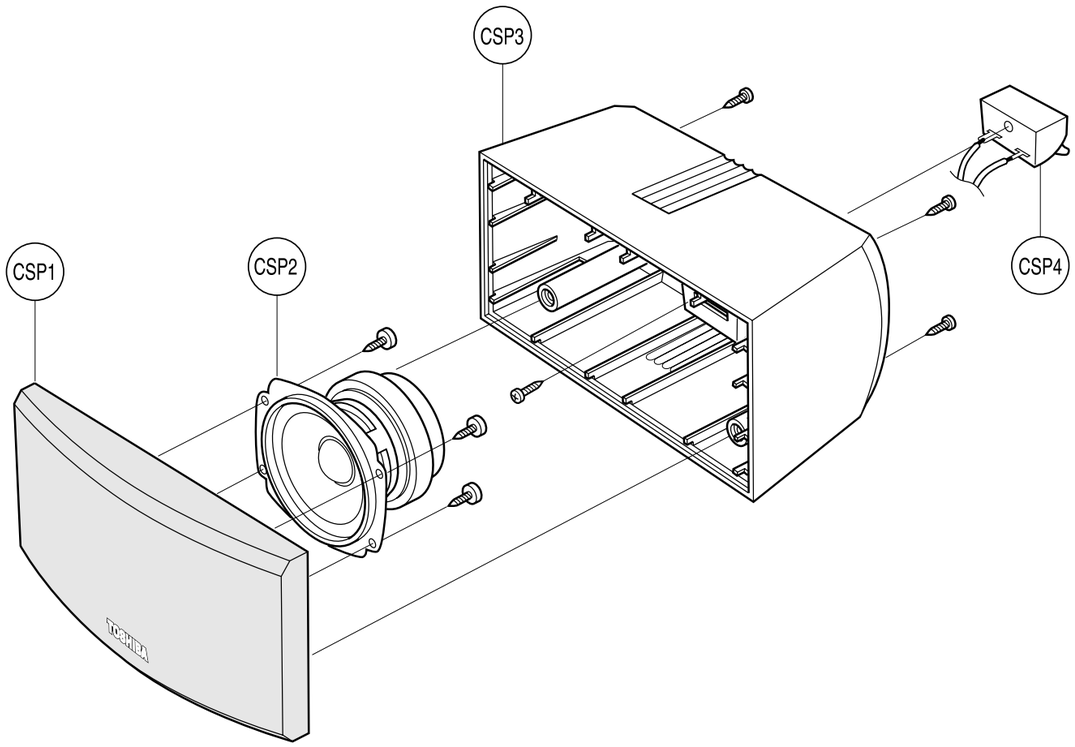
No.	TOSHIBA P/N	Samsung Code No.	Description & Specification	Q'ty	REMARK
ESA	AG000490	AJ60-01001A	SCREW-TAPTITE, BWH, 2*5, YEL	2	
ESB	AG000339	6002-000398	SCREW-TAPTITE, BH, 3*6, YEL	16	
ESC	AG000338	6002-000126	SCREW-TAPTITE, FH, 3*10, BLK	2	
ESD	AG000391	6003-000109	SCREW-TAPTITE, RH, 2.6*8, YEL	5	
ESE	AG000344	6003-001499	SCREW-TAPTITE, BWH, 3*8, SIL	8	
ESF	AG000389	AH60-00014A	SCREW-TAPTITE, TH, 4*6, YEL	4	
ESG	AG000390	AH60-00025A	SCREW-TAPTITE, BH, 3*10, SIL	16	
ESH	AG000417	AH64-01984D	SCREW-TAPTITE, BH, 3*12, SIVER	2	
ESJ	AG000520	6003-001277	SCREW-TAPTITE, BWH, 3*6, YEL	5	

2-2 MECHA Exploded View and Parts list



No.	TOSHIBA P/N	Samsung Code No.	Description	Specification	Q'ty
	AG000487	**AH97-01117A**	**DVD MECHA**	**CMS-D100**	
M01	AG000392	AH61-00746A	BASE-MAIN	ABS BLK	1
M02	AG000409	AH63-00294A	TRAY-DISC	ABS D/GRAY	1
M03	AG000429	AH66-00159C	LEVER-LIFT	ABS BLK	1
M04	AG000430	AH66-00160A	PULLEY-MOTOR	POM WHT	1
M05	AG000431	AH66-00161A	GEAR-PULLEY	TPE WHT	1
M06	AG000432	AH66-00162A	GEAR-MIDDLE	TPE WHT	1
M07	AG000433	AH66-00163A	GEAR-TRAY	POM WHT	1
M08	AG000434	AH66-00164A	CLAMPER-UPPER	POM WHT	1
M09	AG000435	AH66-00165A	CLAMPER-LOWER	POM WHT	1
M10	AG000393	AH61-00747A	BRACKET-CHUCK	SECC t1.0	1
M11	AG000436	AH66-00166A	SLIDE-CAM	POM WHT	1
M12	AG000362	AH31-00030A	MOTOR-DC	RF-300CA-11440	1
M13	AG000376	AH41-00352A	PCB-SWITCH	26.5*21.6	1
M14	AG000437	AH66-00167A	BELT-PULLEY	CR 1.5	1
M15	AG000288	3409-001119	SWITCH-DETECTOR	JDS2200	1
M16	AG000385	AH59-00130A	DVD DECK	CMS-S21MG6	1
M17	AG000337	6001-001257	SCREW-MACHINE	1.7*3(W4.5)	2
M18	AG000490	AJ60-10001A	SCREW-TAP	2*5(W7)	6
M19	AG000343	6003-001210	SCREW-TAP	2.6*6(W12)	5
M20	AG000455	AH73-00025B	RUBBER-CD	BUTYL 15	4
M21	AG000394	AH61-00958A	BRACKET-GUID	SECC 1.0t	1
M22	AG000342	6003-000283	SCREW-TAP	3*8	2

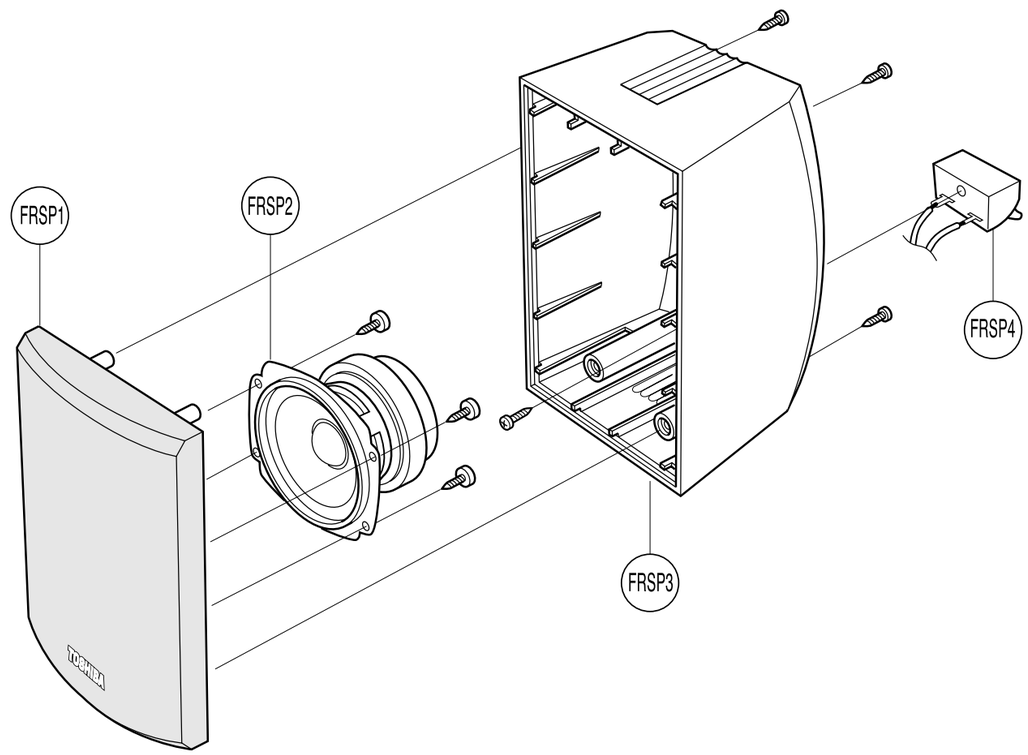
*** CENTER SPEAKER**



SD-43 CENTER SPEAKER : AG000472(AH81-01147J)

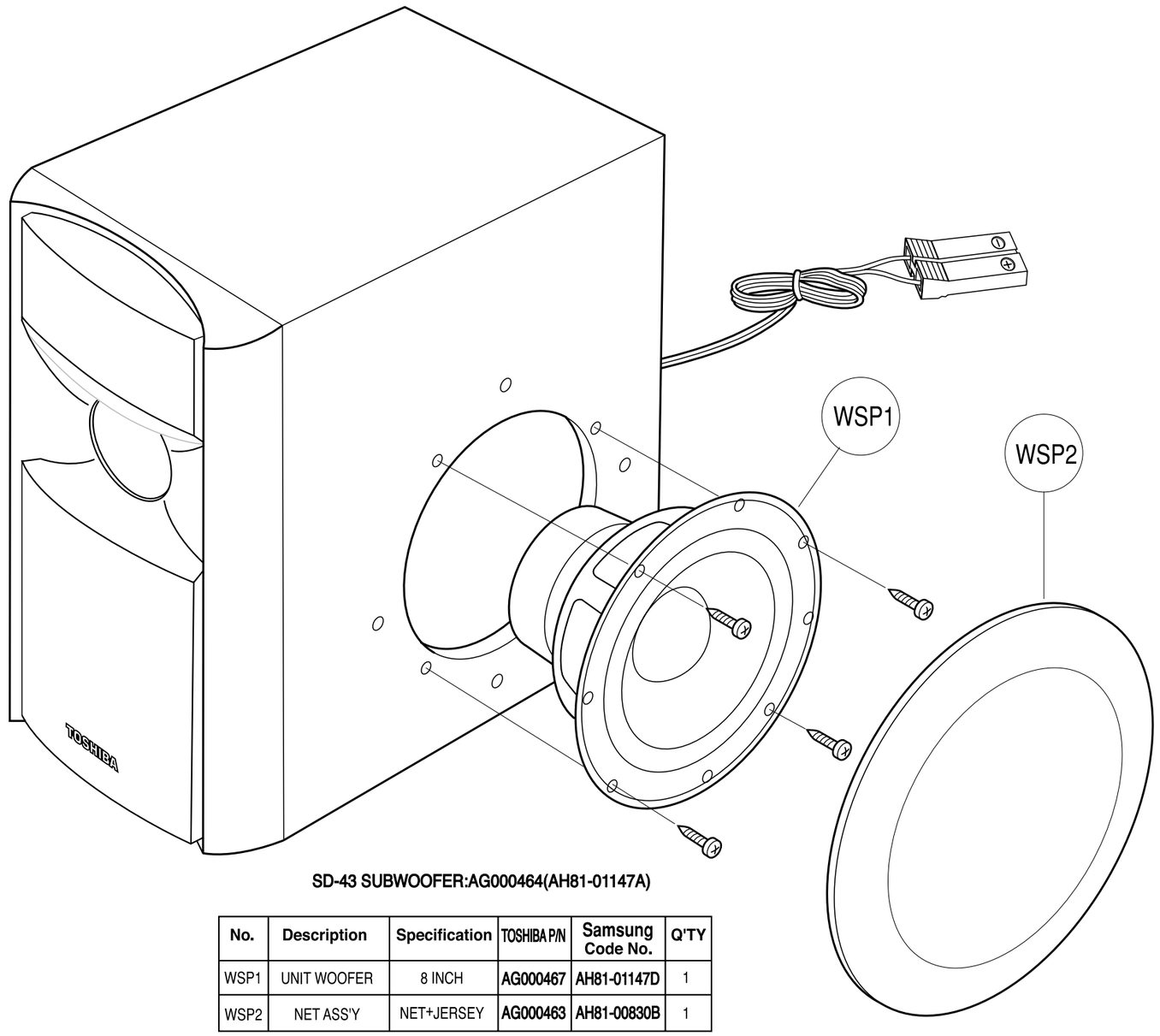
No.	Description	Specification	TOSHIBA P/N	Samsung Code No.	Q'TY
CSP1	FRONT NET ASS'Y	NET+JERSEY +BADGE	AG000462	AH81-00482E	1
CSP2	UNIT-F/RANGE	3 INCH	AG000470	AH81-01147G	1
CSP3	BACK CABINET	HIPS, SLVER	AG000461	AH81-00482C	1
CSP4	TERMINAL	PUSH 2P	AG000457	AH81-00481F	1

*** FRONT/REAR SPEAKER**



SD-43 FRONT/REAR SPEAKER:AG000471(AH81-01147H)

No.	Description	Specification	TOSHIBA P/N	Samsung Code No.	Q'TY
FRSP1	FRONT NET ASS'Y	NET+JERSEY +BADGE	AG000460	AH81-00481M	1
FRSP2	UNIT-F/RANGE	3 INCH	AG000470	AH81-01147G	1
FRSP3	BACK CABINET	HIPS, SLVER	AG000456	AH81-00481C	1
FRSP4	TERMINAL	PUSH 2P	AG000457	AH81-00481F	1



SD-43 SUBWOOFER:AG000464(AH81-01147A)

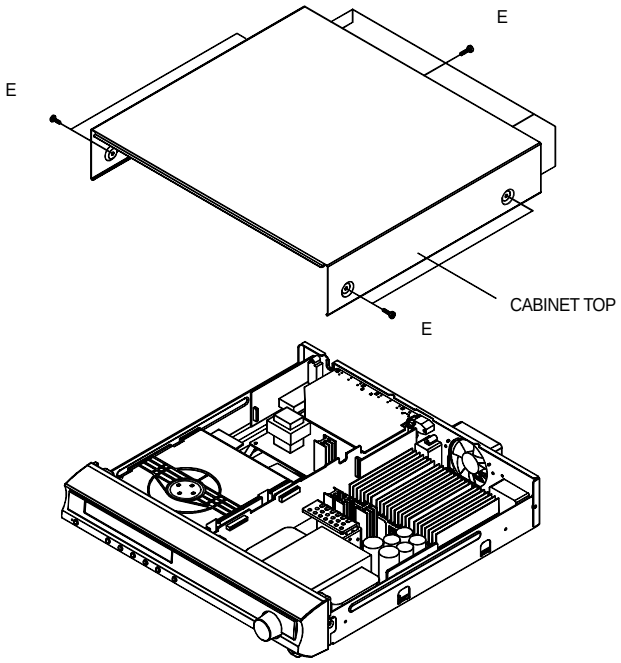
No.	Description	Specification	TOSHIBA P/N	Samsung Code No.	Q'TY
WSP1	UNIT WOOFER	8 INCH	AG000467	AH81-01147D	1
WSP2	NET ASS'Y	NET+JERSEY	AG000463	AH81-00830B	1

3. Disassembly and Reassembly

3-1. CABINET REPLACEMENT

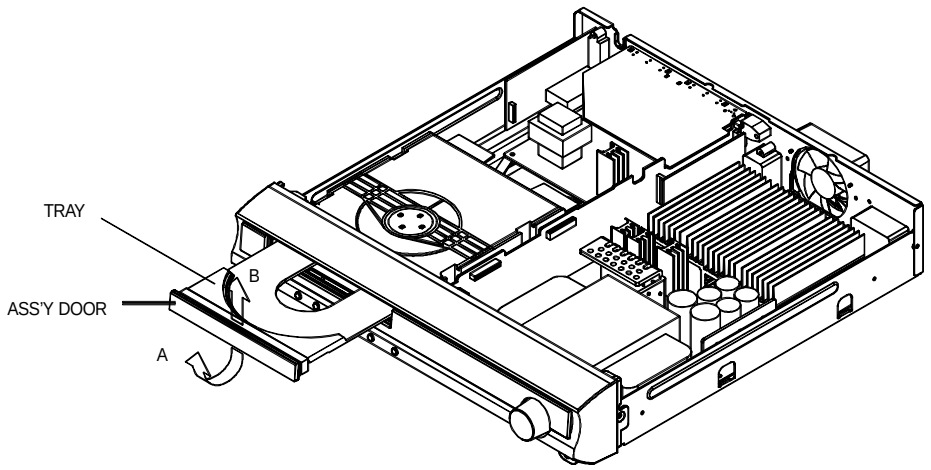
3-1-1. CABINET TOP

1. Remove the top cover by taking out the 9 screws (E) on the periphery that hold it on.



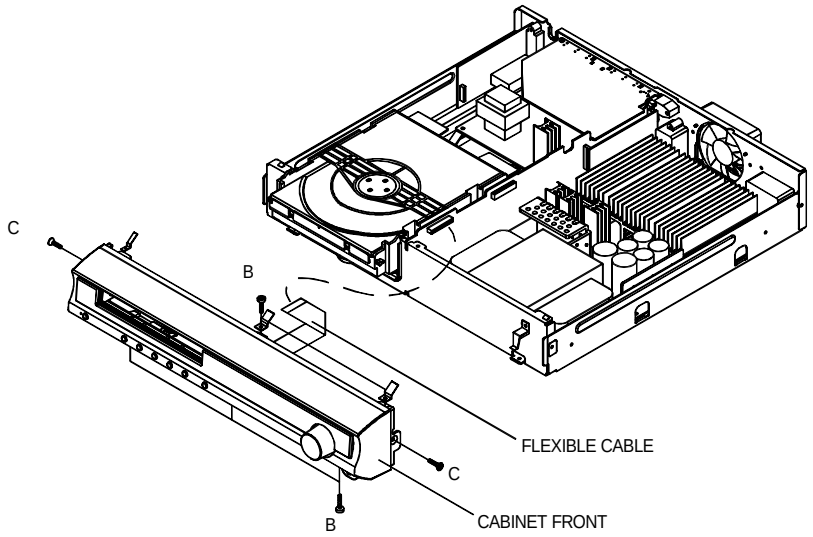
3-1-2. ASS'Y DOOR

1. Turn on the power and open the disc tray.
2. Slightly twist the assembly door in the direction of A and lift it in the direction of B to remove it.
3. Close the assembly door.



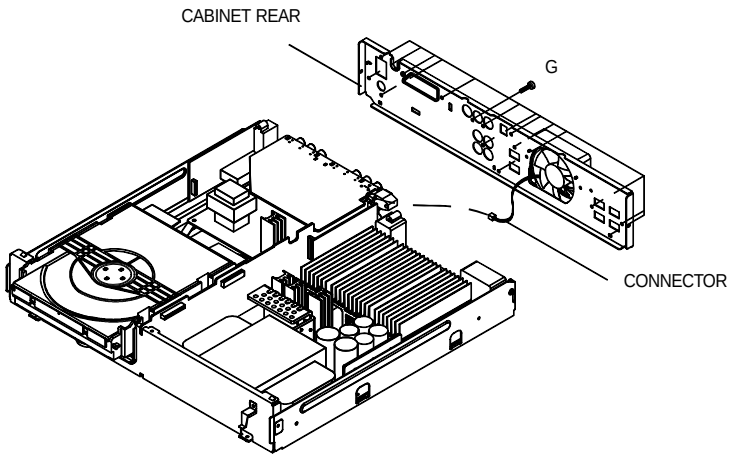
3-1-3. CABINET FRONT

1. Take out the 5 screws (B) and the 2 screws (C).
2. Disconnect the flexible cable and then remove the cabinet front.



3-1-4. CABINET REAR

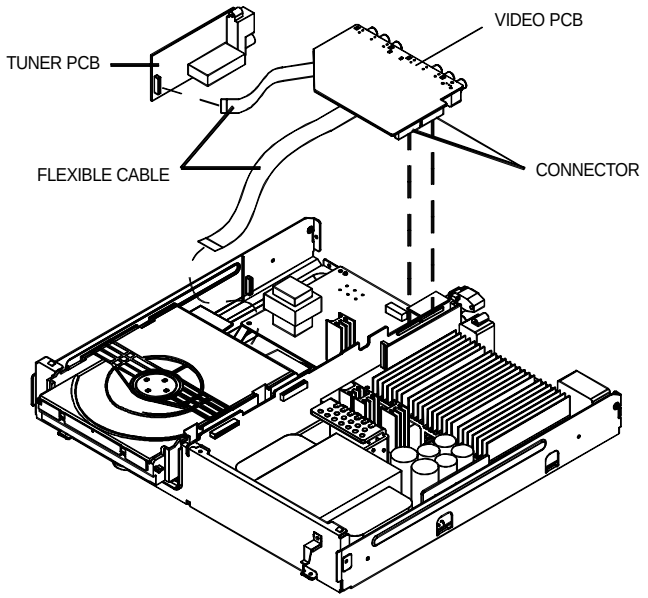
1. Take out the 15 screws (G), unplug the connector, and then remove the cabinet rear.



3-2. PC BOARD REPLACEMENT

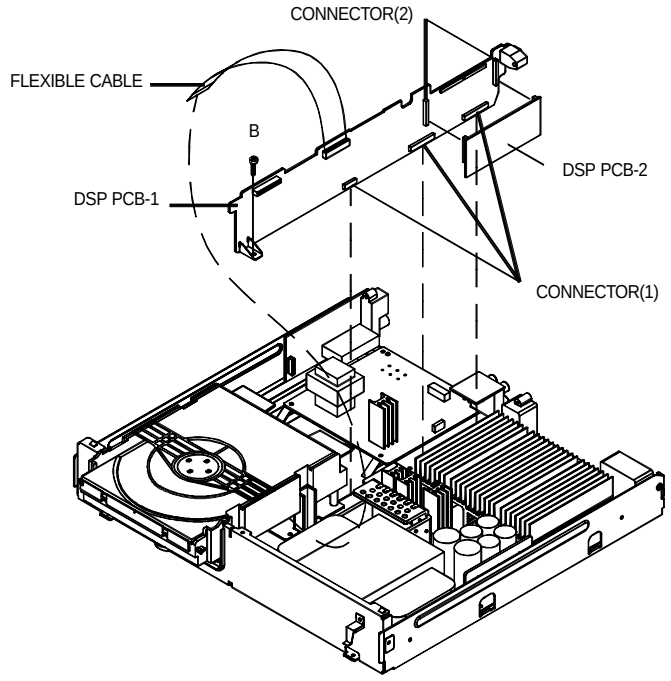
3-2-1. VIDEO PCB, TUNER PCB

1. Disconnect the 2 flexible cables and then remove the TUNER PCB.
2. Unplug the 2 connectors and then remove the VIDEO PCB.



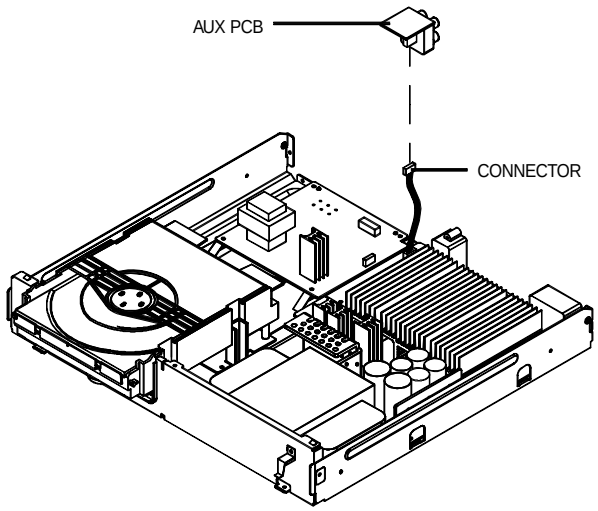
3-2-2. DSP PCB-1, DSP PCB-2

1. Take out the screw (B) and disconnect the flexible cable.
2. Unplug the 3 connectors (CONNECTOR(1)) and then remove the DSP PCB-1.
3. Unplug the 2 connectors (CONNECTOR(2)) and then remove the DSP PCB-2.



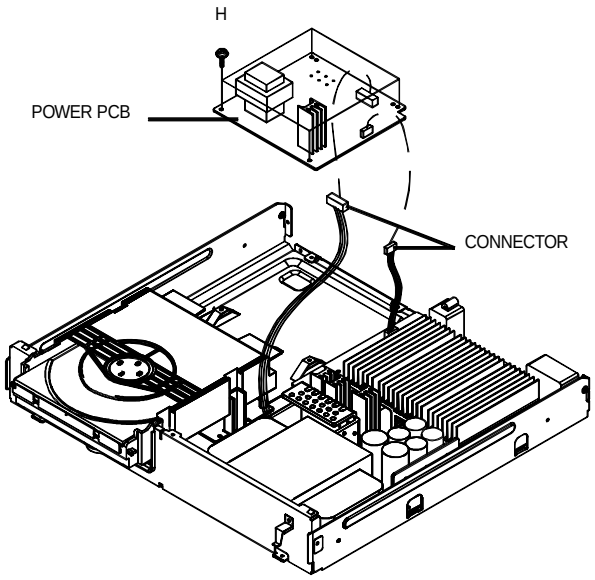
3-2-3. AUX PCB

1. Unplug the connector and then remove the AUX PCB.



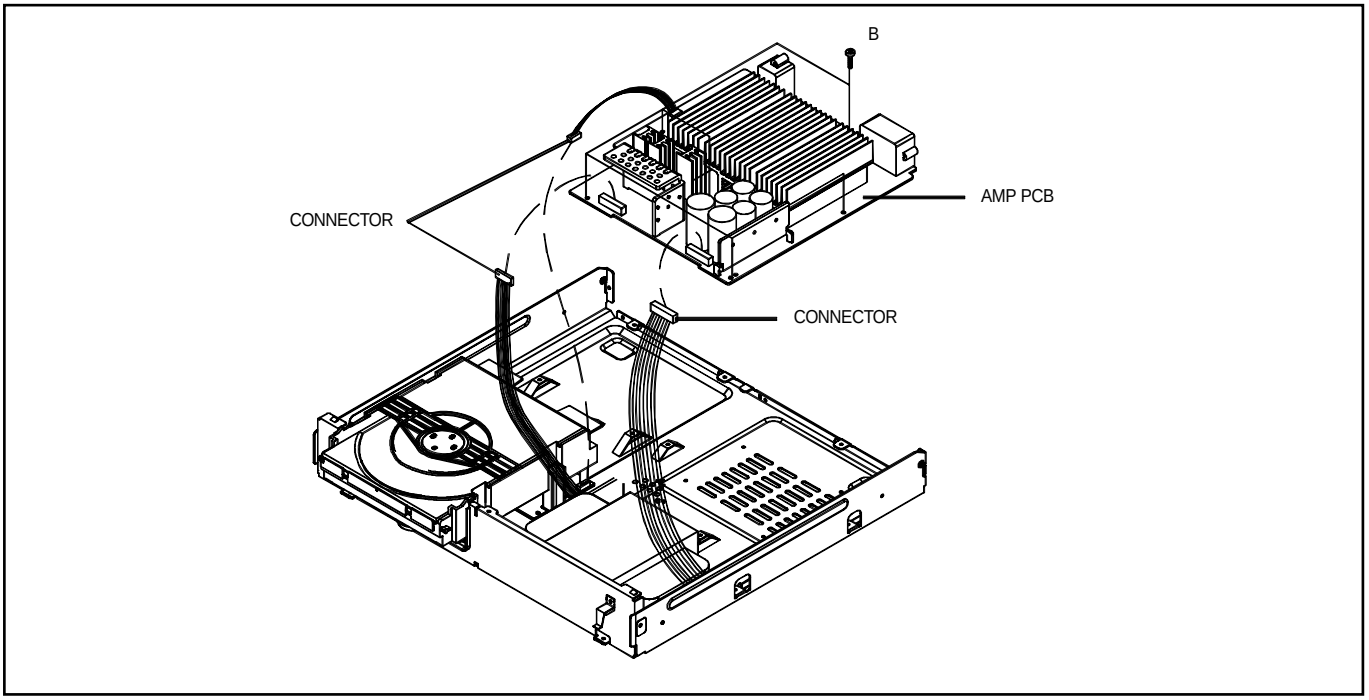
3-2-4. POWER PCB

1. Take out the 4 screws (H).
2. Unplug the 2 connectors and then remove the POWER PCB.



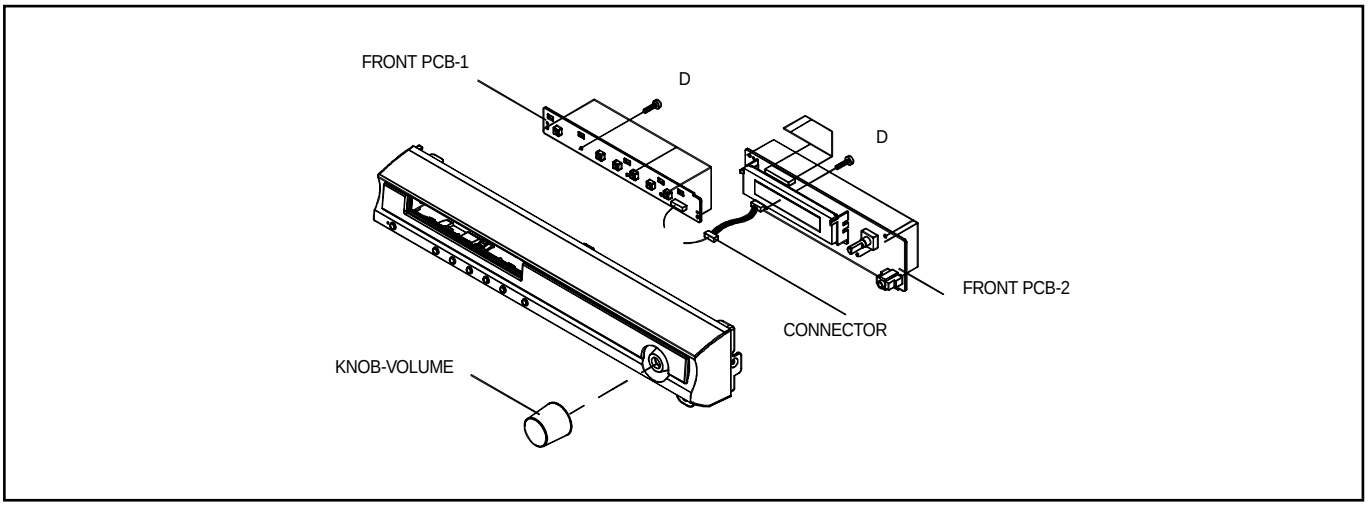
3-2-5. AMP PCB

1. Take out the 6 screws (B).
2. Unplug the 3 connectors and then remove the AMP PCB.



3-2-6. FRONT PCB-1, FRONT PCB-2

1. Remove the KNOB VOLUME and take out the 10 screws (D).
2. Unplug the connector and remove the FRONT PCB-1 and FRONT PCB-2.



4. Electrical Parts List

LOCATION	TOSHIBA PART NO.	SAMSUNG CODE NO.	Description;Specification	REMARK
	AG000525	AH26-00241C	TRANS POWER;-,HT-DM150N,-,0,230V,##22/##	
	AG000528	AH39-00257F	POWER CORD;CP2,250V,2.5A,1830MM	
	AG000529	AH39-00258P	POWER CORD;BS,250V,2.5A,1830MM/	
	AG000371	AH39-40001U	CABLE-AUDIO CABLE,2P2000;-,-,2P-2P,-,-	
	AG000372	AH39-40001V	CABLE-AUDIO CABLE;-,-,1P-1P,3000MM,-,-	
	AG000531	AH40-00050A	TUNER-PACK ASSY;KST-MJ111MS0-60,FM/MW/RD	
	AG000533	AH59-01161B	REMOCON-ASSY;SD43,TOSHIBA,-,-,53KEY,-,-	
	AG000383	AH42-00001B	ANTENNA-FM 1P;X000089-0,-,-,-,-,-,1500##	
	AG000384	AH42-20001P	ANT LOOP;-,KS971120-01,18.5UH##10%,-	
	AG000386	AH59-01119A	DECK-DVD;CMS-S21MG6,HT-DM150N,-,39MM,DC	
	AG000362	AH31-00030A	MOTOR DC;-,RF-300CH,86MA,-,-,1~6V,1410#	
	AG000385	AH59-00130A	DECK;-,CMS-D100,-,-,-,-,-,CMS-S21MG	
	AG000360	AH30-00018A	PICK UP;SOH-D21,-,-,-,-,-,CMS-21MG6	
	AG000407	AH63-00003G	SHEET-WASHER;CMS-D100,PVC,2.0,-,-,BLACK,	
	AG000474	**AH92-01709A**	**ASSY PCB;HT-DM150N,DC MOTOR, ESS, MIDAS**	
D2	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
DZD2	AG000029	0403-001376	DIODE-ZENER;UDZ3.6B,3.6-3.845V,200mW,SOD	
DZD1	AG000030	0403-001411	DIODE-ZENER;-,5.49-5.73V,200MW,SOD-323,T	
RD1	AG000031	0407-000116	DIODE-ARRAY;DAP202K,80V,100mA,CK2-3,SOT-	
RD2	AG000031	0407-000116	DIODE-ARRAY;DAP202K,80V,100mA,CK2-3,SOT-	
VQ1	AG000035	0501-000314	TR-SMALL SIGNAL;KSA812,PNP,150mW,SOT-23,	
VQ3	AG000035	0501-000314	TR-SMALL SIGNAL;KSA812,PNP,150mW,SOT-23,	
VQ4	AG000035	0501-000314	TR-SMALL SIGNAL;KSA812,PNP,150mW,SOT-23,	
VQ5	AG000035	0501-000314	TR-SMALL SIGNAL;KSA812,PNP,150mW,SOT-23,	
VQ6	AG000035	0501-000314	TR-SMALL SIGNAL;KSA812,PNP,150mW,SOT-23,	
RQ1	AG000042	0501-000632	TR-SMALL SIGNAL;2SB1197K,PNP,200mW,SOT-2	
RQ2	AG000042	0501-000632	TR-SMALL SIGNAL;2SB1197K,PNP,200mW,SOT-2	
Q1	AG000047	0504-000128	TR-DIGITAL;-,NPN,200MW,22K/22K,SOT-23,TP	
U17	AG000053	0801-002518	IC-CMOS LOGIC;74LCX157,2-INPUT MULTIPLEX	
U11	AG000054	0801-002683	IC-CMOS LOGIC;74HCT245,TRANSCEIVER,TSSOP	
OPIC2	AG000055	0802-001007	IC-BICMOS LOGIC;74LCX244,BUFFER/LINE DRI	
OPIC3	AG000056	0802-001025	IC-BICMOS LOGIC;74LCX374,D FILP-FLOP,TSS	
OPIC1	AG000058	1001-001170	IC-AUDIO SWITCH;CS8415A-CZ,RECEIVER&DECO	
DRIC1	AG000060	1003-001450	IC-MOTOR DRIVER;BA5954FM,SOP,28P,300MIL,	
DRIC3	AG000061	1003-001508	IC-MOTOR DRIVER;FAN8082DTF,SOP,8P,200MIL	
U16	AG000062	1103-001292	IC-EEPROM;S524A40X21-SCT0,256X8BIT,SOP,8	
U14	AG000063	1105-001369	IC-DRAM;-,4MX16BIT,TSOP(II),54P,400MIL,7	
SIC2	AG000064	1105-001372	IC-DRAM;K4E151512D,1MX16BIT,SOJ,42P,40	
MIC1	AG000065	1107-001203	IC-FLASH MEMORY;49F512,64Kx8Bit,PLCC,32P	
U15	AG000066	1107-001416	IC-FLASH MEMORY;M29W800DT,1MX8/512KX16BI	
RIC1	AG000069	1201-001790	IC-RF AMP;SP3721A,TQFP,64P,10MIL,SINGLE,	
RIC2	AG000070	1201-001842	IC-OP AMP;TL3472CD,SO,TP,8P,-,DUAL,-,PAL	
MIC3	AG000076	1203-001369	IC-VOL. DETECTOR;61AN1902,SOT-23,3P,63MI	
REG4	AG000077	1203-002425	IC-POSI.FIXED REG.;AP1117,SOT-223,3P,138	
REG1	AG000080	1203-002877	IC-POSI.FIXED REG.;AIC1117A-50CY,SOT-223	
REG2	AG000081	1203-002935	IC-POSI.ADJUST REG.;AIC1117ACE,TO-252,3P	
REG3	AG000081	1203-002935	IC-POSI.ADJUST REG.;AIC1117ACE,TO-252,3P	
SIC1	AG000083	1204-001936	IC-DECODER;M5705,LQFP,176P,24X24MM,PALST	
AIC1	AG000085	1205-002215	IC-CODEC;STAC9460S,SSOP,28P,10.2X5.3MM,	
VL2	AG000118	2007-000029	R-CHIP;0ohm,5%,1/8W,TP,2012	
PL5	AG000118	2007-000029	R-CHIP;0ohm,5%,1/8W,TP,2012	
L4	AG000118	2007-000029	R-CHIP;0ohm,5%,1/8W,TP,2012	
AR8	AG000118	2007-000029	R-CHIP;0ohm,5%,1/8W,TP,2012	
DR56	AG000118	2007-000029	R-CHIP;0ohm,5%,1/8W,TP,2012	
DR57	AG000118	2007-000029	R-CHIP;0ohm,5%,1/8W,TP,2012	
L38	AG000118	2007-000029	R-CHIP;0ohm,5%,1/8W,TP,2012	
RR21	AG000119	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	
RR2	AG000119	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	
RR11	AG000119	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	
R99	AG000119	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	
RR27	AG000119	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	
RR6	AG000119	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	
RR7	AG000119	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	
SR13	AG000119	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	
SR19	AG000119	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	
MR22	AG000119	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	
MR18	AG000119	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	
MR158	AG000119	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	
ATL4	AG000119	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	
ATL3	AG000119	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	
MR30	AG000119	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	
R96	AG000119	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	
R87	AG000119	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	
R47	AG000119	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	
R112	AG000119	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	
MR32	AG000119	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	
R25	AG000120	2007-000074	R-CHIP;100ohm,5%,1/10W,TP,1608	
R24	AG000120	2007-000074	R-CHIP;100ohm,5%,1/10W,TP,1608	
R23	AG000120	2007-000074	R-CHIP;100ohm,5%,1/10W,TP,1608	
R27	AG000120	2007-000074	R-CHIP;100ohm,5%,1/10W,TP,1608	
R88	AG000120	2007-000074	R-CHIP;100ohm,5%,1/10W,TP,1608	
TR1	AG000120	2007-000074	R-CHIP;100ohm,5%,1/10W,TP,1608	
AR40	AG000120	2007-000074	R-CHIP;100ohm,5%,1/10W,TP,1608	

LOCATION	TOSHIBA PART NO.	SAMSUNG CODE NO.	Description;Specification	REMARK
AR44	AG000120	2007-000074	R-CHIP;100ohm,5%,1/10W,TP,1608	
AR51	AG000120	2007-000074	R-CHIP;100ohm,5%,1/10W,TP,1608	
L29	AG000120	2007-000074	R-CHIP;100ohm,5%,1/10W,TP,1608	
L32	AG000120	2007-000074	R-CHIP;100ohm,5%,1/10W,TP,1608	
L33	AG000120	2007-000074	R-CHIP;100ohm,5%,1/10W,TP,1608	
L34	AG000120	2007-000074	R-CHIP;100ohm,5%,1/10W,TP,1608	
L35	AG000120	2007-000074	R-CHIP;100ohm,5%,1/10W,TP,1608	
RR32	AG000121	2007-000075	R-CHIP;220ohm,5%,1/10W,TP,1608	
R1	AG000121	2007-000075	R-CHIP;220ohm,5%,1/10W,TP,1608	
AR13	AG000121	2007-000075	R-CHIP;220ohm,5%,1/10W,TP,1608	
SR34	AG000122	2007-000076	R-CHIP;330ohm,5%,1/10W,TP,1608	
SR35	AG000122	2007-000076	R-CHIP;330ohm,5%,1/10W,TP,1608	
SR36	AG000122	2007-000076	R-CHIP;330ohm,5%,1/10W,TP,1608	
SR37	AG000122	2007-000076	R-CHIP;330ohm,5%,1/10W,TP,1608	
MR12	AG000122	2007-000076	R-CHIP;330ohm,5%,1/10W,TP,1608	
MR14	AG000122	2007-000076	R-CHIP;330ohm,5%,1/10W,TP,1608	
MR15	AG000122	2007-000076	R-CHIP;330ohm,5%,1/10W,TP,1608	
MR19	AG000122	2007-000076	R-CHIP;330ohm,5%,1/10W,TP,1608	
MR17	AG000122	2007-000076	R-CHIP;330ohm,5%,1/10W,TP,1608	
MR16	AG000122	2007-000076	R-CHIP;330ohm,5%,1/10W,TP,1608	
R28	AG000123	2007-000078	R-CHIP;1Kohm,5%,1/10W,TP,1608	
R35	AG000123	2007-000078	R-CHIP;1Kohm,5%,1/10W,TP,1608	
R55	AG000123	2007-000078	R-CHIP;1Kohm,5%,1/10W,TP,1608	
RR12	AG000123	2007-000078	R-CHIP;1Kohm,5%,1/10W,TP,1608	
RR3	AG000123	2007-000078	R-CHIP;1Kohm,5%,1/10W,TP,1608	
SR22	AG000123	2007-000078	R-CHIP;1Kohm,5%,1/10W,TP,1608	
R26	AG000123	2007-000078	R-CHIP;1Kohm,5%,1/10W,TP,1608	
AR1	AG000123	2007-000078	R-CHIP;1Kohm,5%,1/10W,TP,1608	
AR52	AG000123	2007-000078	R-CHIP;1Kohm,5%,1/10W,TP,1608	
DR46	AG000123	2007-000078	R-CHIP;1Kohm,5%,1/10W,TP,1608	
DR49	AG000123	2007-000078	R-CHIP;1Kohm,5%,1/10W,TP,1608	
DR50	AG000123	2007-000078	R-CHIP;1Kohm,5%,1/10W,TP,1608	
MR21	AG000123	2007-000078	R-CHIP;1Kohm,5%,1/10W,TP,1608	
R103	AG000123	2007-000078	R-CHIP;1Kohm,5%,1/10W,TP,1608	
R102	AG000123	2007-000078	R-CHIP;1Kohm,5%,1/10W,TP,1608	
R34	AG000124	2007-000081	R-CHIP;2.7Kohm,5%,1/10W,TP,1608	
SR9	AG000125	2007-000082	R-CHIP;3.3Kohm,5%,1/10W,TP,1608	
SR17	AG000125	2007-000082	R-CHIP;3.3Kohm,5%,1/10W,TP,1608	
DR13	AG000125	2007-000082	R-CHIP;3.3Kohm,5%,1/10W,TP,1608	
SR10	AG000125	2007-000082	R-CHIP;3.3Kohm,5%,1/10W,TP,1608	
SR11	AG000125	2007-000082	R-CHIP;3.3Kohm,5%,1/10W,TP,1608	
R79	AG000126	2007-000084	R-CHIP;4.7Kohm,5%,1/10W,TP,1608	
R78	AG000126	2007-000084	R-CHIP;4.7Kohm,5%,1/10W,TP,1608	
R76	AG000126	2007-000084	R-CHIP;4.7Kohm,5%,1/10W,TP,1608	
R74	AG000126	2007-000084	R-CHIP;4.7Kohm,5%,1/10W,TP,1608	
SR12	AG000126	2007-000084	R-CHIP;4.7Kohm,5%,1/10W,TP,1608	
SR18	AG000126	2007-000084	R-CHIP;4.7Kohm,5%,1/10W,TP,1608	
SR31	AG000126	2007-000084	R-CHIP;4.7Kohm,5%,1/10W,TP,1608	
SR5	AG000126	2007-000084	R-CHIP;4.7Kohm,5%,1/10W,TP,1608	
R48	AG000126	2007-000084	R-CHIP;4.7Kohm,5%,1/10W,TP,1608	
R19	AG000126	2007-000084	R-CHIP;4.7Kohm,5%,1/10W,TP,1608	
R110	AG000126	2007-000084	R-CHIP;4.7Kohm,5%,1/10W,TP,1608	
MR23	AG000126	2007-000084	R-CHIP;4.7Kohm,5%,1/10W,TP,1608	
C93	AG000126	2007-000084	R-CHIP;4.7Kohm,5%,1/10W,TP,1608	
R73	AG000126	2007-000084	R-CHIP;4.7Kohm,5%,1/10W,TP,1608	
R72	AG000126	2007-000084	R-CHIP;4.7Kohm,5%,1/10W,TP,1608	
R61	AG000126	2007-000084	R-CHIP;4.7Kohm,5%,1/10W,TP,1608	
R50	AG000126	2007-000084	R-CHIP;4.7Kohm,5%,1/10W,TP,1608	
R49	AG000126	2007-000084	R-CHIP;4.7Kohm,5%,1/10W,TP,1608	
RR26	AG000127	2007-000088	R-CHIP;7.5Kohm,5%,1/10W,TP,1608	
RR16	AG000128	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	
SR24	AG000128	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	
SR28	AG000128	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	
TR2	AG000128	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	
DR15	AG000128	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	
DR2	AG000128	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	
DR6	AG000128	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	
R43	AG000128	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	
RR15	AG000128	2007-000090	R-CHIP;10Kohm,5%,1/10W,TP,1608	
DR11	AG000129	2007-000091	R-CHIP;12Kohm,5%,1/10W,TP,1608	
SR7	AG000130	2007-000093	R-CHIP;20Kohm,5%,1/10W,TP,1608	
SR33	AG000131	2007-000094	R-CHIP;22Kohm,5%,1/10W,TP,1608	
MR26	AG000131	2007-000094	R-CHIP;22Kohm,5%,1/10W,TP,1608	
SR27	AG000132	2007-000097	R-CHIP;47Kohm,5%,1/10W,TP,1608	
SR14	AG000132	2007-000097	R-CHIP;47Kohm,5%,1/10W,TP,1608	
DR7	AG000132	2007-000097	R-CHIP;47Kohm,5%,1/10W,TP,1608	
DR17	AG000132	2007-000097	R-CHIP;47Kohm,5%,1/10W,TP,1608	
DR16	AG000132	2007-000097	R-CHIP;47Kohm,5%,1/10W,TP,1608	
DR12	AG000132	2007-000097	R-CHIP;47Kohm,5%,1/10W,TP,1608	
DR1	AG000132	2007-000097	R-CHIP;47Kohm,5%,1/10W,TP,1608	
RR25	AG000133	2007-000098	R-CHIP;56Kohm,5%,1/10W,TP,1608	
R104	AG000134	2007-000102	R-CHIP;100Kohm,5%,1/10W,TP,1608	
AR36	AG000134	2007-000102	R-CHIP;100Kohm,5%,1/10W,TP,1608	
AR32	AG000134	2007-000102	R-CHIP;100Kohm,5%,1/10W,TP,1608	
AR16	AG000134	2007-000102	R-CHIP;100Kohm,5%,1/10W,TP,1608	
AR20	AG000134	2007-000102	R-CHIP;100Kohm,5%,1/10W,TP,1608	
AR28	AG000134	2007-000102	R-CHIP;100Kohm,5%,1/10W,TP,1608	
AR24	AG000134	2007-000102	R-CHIP;100Kohm,5%,1/10W,TP,1608	
RR28	AG000135	2007-000107	R-CHIP;470Kohm,5%,1/10W,TP,1608	

LOCATION	TOSHIBA PART NO.	SAMSUNG CODE NO.	Description;Specification	REMARK
R95	AG000136	2007-000113	R-CHIP;33ohm,5%,1/10W,TP,1608	
R94	AG000136	2007-000113	R-CHIP;33ohm,5%,1/10W,TP,1608	
R93	AG000136	2007-000113	R-CHIP;33ohm,5%,1/10W,TP,1608	
R92	AG000136	2007-000113	R-CHIP;33ohm,5%,1/10W,TP,1608	
R89	AG000136	2007-000113	R-CHIP;33ohm,5%,1/10W,TP,1608	
SR15	AG000136	2007-000113	R-CHIP;33ohm,5%,1/10W,TP,1608	
RR9	AG000136	2007-000113	R-CHIP;33ohm,5%,1/10W,TP,1608	
RR8	AG000136	2007-000113	R-CHIP;33ohm,5%,1/10W,TP,1608	
RR5	AG000136	2007-000113	R-CHIP;33ohm,5%,1/10W,TP,1608	
R98	AG000136	2007-000113	R-CHIP;33ohm,5%,1/10W,TP,1608	
R86	AG000136	2007-000113	R-CHIP;33ohm,5%,1/10W,TP,1608	
R107	AG000136	2007-000113	R-CHIP;33ohm,5%,1/10W,TP,1608	
R106	AG000136	2007-000113	R-CHIP;33ohm,5%,1/10W,TP,1608	
R105	AG000136	2007-000113	R-CHIP;33ohm,5%,1/10W,TP,1608	
DR10	AG000136	2007-000113	R-CHIP;33ohm,5%,1/10W,TP,1608	
AR12	AG000136	2007-000113	R-CHIP;33ohm,5%,1/10W,TP,1608	
R22	AG000136	2007-000113	R-CHIP;33ohm,5%,1/10W,TP,1608	
R85	AG000136	2007-000113	R-CHIP;33ohm,5%,1/10W,TP,1608	
R67	AG000136	2007-000113	R-CHIP;33ohm,5%,1/10W,TP,1608	
R57	AG000136	2007-000113	R-CHIP;33ohm,5%,1/10W,TP,1608	
R45	AG000136	2007-000113	R-CHIP;33ohm,5%,1/10W,TP,1608	
R44	AG000136	2007-000113	R-CHIP;33ohm,5%,1/10W,TP,1608	
VR24	AG000137	2007-000115	R-CHIP;82ohm,5%,1/10W,TP,1608	
VR21	AG000137	2007-000115	R-CHIP;82ohm,5%,1/10W,TP,1608	
VR15	AG000137	2007-000115	R-CHIP;82ohm,5%,1/10W,TP,1608	
VR1	AG000137	2007-000115	R-CHIP;82ohm,5%,1/10W,TP,1608	
R2	AG000138	2007-000118	R-CHIP;390ohm,5%,1/10W,TP,1608	
RR33	AG000139	2007-000119	R-CHIP;560ohm,5%,1/10W,TP,1608	
SR1	AG000140	2007-000122	R-CHIP;1.2Kohm,5%,1/10W,TP,1608	
RR14	AG000140	2007-000122	R-CHIP;1.2Kohm,5%,1/10W,TP,1608	
RR13	AG000140	2007-000122	R-CHIP;1.2Kohm,5%,1/10W,TP,1608	
R58	AG000140	2007-000122	R-CHIP;1.2Kohm,5%,1/10W,TP,1608	
LR2	AG000141	2007-000124	R-CHIP;2.2Kohm,5%,1/10W,TP,1608	
LR1	AG000141	2007-000124	R-CHIP;2.2Kohm,5%,1/10W,TP,1608	
SR2	AG000142	2007-000131	R-CHIP;91Kohm,5%,1/10W,TP,1608	
SR3	AG000142	2007-000131	R-CHIP;91Kohm,5%,1/10W,TP,1608	
DR8	AG000143	2007-000134	R-CHIP;33Kohm,5%,1/10W,TP,1608	
DR5	AG000143	2007-000134	R-CHIP;33Kohm,5%,1/10W,TP,1608	
RR10	AG000150	2007-000308	R-CHIP;10ohm,5%,1/8W,TP,2012	
RR1	AG000150	2007-000308	R-CHIP;10ohm,5%,1/8W,TP,2012	
PR1	AG000150	2007-000308	R-CHIP;10ohm,5%,1/8W,TP,2012	
AR3	AG000150	2007-000308	R-CHIP;10ohm,5%,1/8W,TP,2012	
SR26	AG000151	2007-000309	R-CHIP;10ohm,5%,1/10W,TP,1608	
SR23	AG000151	2007-000309	R-CHIP;10ohm,5%,1/10W,TP,1608	
VR25	AG000153	2007-000402	R-CHIP;150ohm,5%,1/10W,TP,1608	
VR22	AG000153	2007-000402	R-CHIP;150ohm,5%,1/10W,TP,1608	
VR20	AG000153	2007-000402	R-CHIP;150ohm,5%,1/10W,TP,1608	
VR2	AG000153	2007-000402	R-CHIP;150ohm,5%,1/10W,TP,1608	
VR18	AG000153	2007-000402	R-CHIP;150ohm,5%,1/10W,TP,1608	
DR35	AG000157	2007-000483	R-CHIP;1ohm,5%,1/8W,TP,2012	
DR34	AG000157	2007-000483	R-CHIP;1ohm,5%,1/8W,TP,2012	
DR31	AG000157	2007-000483	R-CHIP;1ohm,5%,1/8W,TP,2012	
DR30	AG000157	2007-000483	R-CHIP;1ohm,5%,1/8W,TP,2012	
R91	AG000159	2007-000539	R-CHIP;200ohm,5%,1/10W,TP,1608	
R59	AG000164	2007-000643	R-CHIP;270ohm,5%,1/10W,TP,1608	
AR4	AG000168	2007-000694	R-CHIP;3.3ohm,5%,1/8W,TP,2012	
R60	AG000170	2007-000799	R-CHIP;360ohm,5%,1/10W,TP,1608	
JR1	AG000171	2007-000872	R-CHIP;4.7Kohm,5%,1/8W,TP,2012	
SR29	AG000174	2007-000962	R-CHIP;5.1Kohm,1%,1/10W,TP,1608	
SR21	AG000174	2007-000962	R-CHIP;5.1Kohm,1%,1/10W,TP,1608	
SR8	AG000176	2007-001010	R-CHIP;51Kohm,5%,1/10W,TP,1608	
R14	AG000178	2007-001042	R-CHIP;56ohm,1%,1/10W,TP,1608	
R90	AG000180	2007-001167	R-CHIP;75ohm,5%,1/10W,TP,1608	
AR9	AG000180	2007-001167	R-CHIP;75ohm,5%,1/10W,TP,1608	
AR15	AG000180	2007-001167	R-CHIP;75ohm,5%,1/10W,TP,1608	
AR14	AG000180	2007-001167	R-CHIP;75ohm,5%,1/10W,TP,1608	
AR11	AG000180	2007-001167	R-CHIP;75ohm,5%,1/10W,TP,1608	
AR10	AG000180	2007-001167	R-CHIP;75ohm,5%,1/10W,TP,1608	
RR4	AG000182	2007-001179	R-CHIP;8.2Kohm,5%,1/10W,TP,1608	
RR30	AG000182	2007-001179	R-CHIP;8.2Kohm,5%,1/10W,TP,1608	
TN5	AG000186	2011-000475	R-NETWORK;33OHM,5%,1/16W,L,CHIP,8P,TP,32	
TN3	AG000186	2011-000475	R-NETWORK;33OHM,5%,1/16W,L,CHIP,8P,TP,32	
SN1	AG000186	2011-000475	R-NETWORK;33OHM,5%,1/16W,L,CHIP,8P,TP,32	
TN4	AG000187	2011-000585	R-NETWORK;47OHM,5%,1/16W,L,CHIP,8P,TP	
RN5	AG000188	2011-000651	R-NETWORK;10OHM,5%,1/16W,L,CHIP,8P,TP,32	
RN6	AG000188	2011-000651	R-NETWORK;10OHM,5%,1/16W,L,CHIP,8P,TP,32	
RN7	AG000188	2011-000651	R-NETWORK;10OHM,5%,1/16W,L,CHIP,8P,TP,32	
RN4	AG000188	2011-000651	R-NETWORK;10OHM,5%,1/16W,L,CHIP,8P,TP,32	
RN3	AG000188	2011-000651	R-NETWORK;10OHM,5%,1/16W,L,CHIP,8P,TP,32	
RN2	AG000188	2011-000651	R-NETWORK;10OHM,5%,1/16W,L,CHIP,8P,TP,32	
RN1	AG000188	2011-000651	R-NETWORK;10OHM,5%,1/16W,L,CHIP,8P,TP,32	
TN13	AG000189	2011-000816	R-NETWORK;100OHM,5%,1/16W,L,CHIP,8P,TP	
TN12	AG000189	2011-000816	R-NETWORK;100OHM,5%,1/16W,L,CHIP,8P,TP	
TN11	AG000189	2011-000816	R-NETWORK;100OHM,5%,1/16W,L,CHIP,8P,TP	
TN10	AG000189	2011-000816	R-NETWORK;100OHM,5%,1/16W,L,CHIP,8P,TP	
TN7	AG000190	2011-001011	R-NETWORK;10KOHM,5%,1/16W,L,CHIP,8P,TP	
TN8	AG000190	2011-001011	R-NETWORK;10KOHM,5%,1/16W,L,CHIP,8P,TP	
TN9	AG000190	2011-001011	R-NETWORK;10KOHM,5%,1/16W,L,CHIP,8P,TP	
TN1	AG000190	2011-001011	R-NETWORK;10KOHM,5%,1/16W,L,CHIP,8P,TP	
TN2	AG000190	2011-001011	R-NETWORK;10KOHM,5%,1/16W,L,CHIP,8P,TP	
TN6	AG000190	2011-001011	R-NETWORK;10KOHM,5%,1/16W,L,CHIP,8P,TP	
RC21	AG000197	2203-000236	C-CERAMIC,CHIP;0.1NF,5%,50V,C0G,TP,1608	
DC3	AG000197	2203-000236	C-CERAMIC,CHIP;0.1NF,5%,50V,C0G,TP,1608	
DC2	AG000197	2203-000236	C-CERAMIC,CHIP;0.1NF,5%,50V,C0G,TP,1608	
TC1	AG000198	2203-000257	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,1608	
C57	AG000198	2203-000257	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,1608	
TC7	AG000200	2203-000280	C-CERAMIC,CHIP;0.01NF,0.5PF,50V,C0G,TP,1	
TC6	AG000200	2203-000280	C-CERAMIC,CHIP;0.01NF,0.5PF,50V,C0G,TP,1	
TC5	AG000200	2203-000280	C-CERAMIC,CHIP;0.01NF,0.5PF,50V,C0G,TP,1	
TC4	AG000200	2203-000280	C-CERAMIC,CHIP;0.01NF,0.5PF,50V,C0G,TP,1	
TC3	AG000200	2203-000280	C-CERAMIC,CHIP;0.01NF,0.5PF,50V,C0G,TP,1	
TC2	AG000200	2203-000280	C-CERAMIC,CHIP;0.01NF,0.5PF,50V,C0G,TP,1	
C86	AG000204	2203-000384	C-CERAMIC,CHIP;0.015NF,5%,50V,C0G,TP,160	
SC20	AG000205	2203-000440	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,1608,-	
SC19	AG000205	2203-000440	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,1608,-	
SC11	AG000205	2203-000440	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,1608,-	
RC26	AG000205	2203-000440	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,1608,-	
RC22	AG000205	2203-000440	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,1608,-	
AC31	AG000205	2203-000440	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,1608,-	
AC35	AG000205	2203-000440	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,1608,-	
RC10	AG000205	2203-000440	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,1608,-	
C116	AG000208	2203-000646	C-CERAMIC,CHIP;0.024NF,5%,50V,C0G,TP,160	
C53	AG000209	2203-000681	C-CERAMIC,CHIP;0.027NF,5%,50V,C0G,TP,160	
C54	AG000209	2203-000681	C-CERAMIC,CHIP;0.027NF,5%,50V,C0G,TP,160	
C55	AG000209	2203-000681	C-CERAMIC,CHIP;0.027NF,5%,50V,C0G,TP,160	
RC46	AG000209	2203-000681	C-CERAMIC,CHIP;0.027NF,5%,50V,C0G,TP,160	
C52	AG000209	2203-000681	C-CERAMIC,CHIP;0.027NF,5%,50V,C0G,TP,160	
C51	AG000209	2203-000681	C-CERAMIC,CHIP;0.027NF,5%,50V,C0G,TP,160	
C115	AG000209	2203-000681	C-CERAMIC,CHIP;0.027NF,5%,50V,C0G,TP,160	
DC4	AG000212	2203-000888	C-CERAMIC,CHIP;4.7nF,10%,50V,X7R,TP,1608	
C59	AG000212	2203-000888	C-CERAMIC,CHIP;4.7nF,10%,50V,X7R,TP,1608	
SC14	AG000214	2203-000972	C-CERAMIC,CHIP;47nF,10%,16V,X7R,TP,1608	
SC1	AG000214	2203-000972	C-CERAMIC,CHIP;47nF,10%,16V,X7R,TP,1608	
RC17	AG000214	2203-000972	C-CERAMIC,CHIP;47nF,10%,16V,X7R,TP,1608	
SC6	AG000215	2203-000998	C-CERAMIC,CHIP;0.047NF,5%,50V,C0G,TP,160	
SC28	AG000215	2203-000998	C-CERAMIC,CHIP;0.047NF,5%,50V,C0G,TP,160	
C101	AG000215	2203-000998	C-CERAMIC,CHIP;0.047NF,5%,50V,C0G,TP,160	
SC2	AG000217	2203-001052	C-CERAMIC,CHIP;0.56nF,10%,50V,X7R,TP,160	
RC48	AG000218	2203-001071	C-CERAMIC,CHIP;0.056NF,5%,50V,C0G,TP,160	
RC47	AG000218	2203-001071	C-CERAMIC,CHIP;0.056NF,5%,50V,C0G,TP,160	
SC12	AG000219	2203-001103	C-CERAMIC,CHIP;6.8nF,10%,50V,X7R,TP,1608	
RC9	AG000220	2203-001126	C-CERAMIC,CHIP;0.68nF,10%,50V,X7R,TP,160	
RC19	AG000220	2203-001126	C-CERAMIC,CHIP;0.68nF,10%,50V,X7R,TP,160	
RC18	AG000220	2203-001126	C-CERAMIC,CHIP;0.68nF,10%,50V,X7R,TP,160	
RC15	AG000220	2203-001126	C-CERAMIC,CHIP;0.68nF,10%,50V,X7R,TP,160	
RC13	AG000220	2203-001126	C-CERAMIC,CHIP;0.68nF,10%,50V,X7R,TP,160	
SC35	AG000225	2203-001573	C-CERAMIC,CHIP;0.012nF,5%,50V,NP0,TP,160	
SC29	AG000225	2203-001573	C-CERAMIC,CHIP;0.012nF,5%,50V,NP0,TP,160	
RC39	AG000229	2203-001636	C-CERAMIC,CHIP;0.033nF,5%,50V,NP0,TP,160	
RC16	AG000229	2203-001636	C-CERAMIC,CHIP;0.033nF,5%,50V,NP0,TP,160	
RC14	AG000229	2203-001636	C-CERAMIC,CHIP;0.033nF,5%,50V,NP0,TP,160	
RC12	AG000229	2203-001636	C-CERAMIC,CHIP;0.033nF,5%,50V,NP0,TP,160	
RC42	AG000512	2203-001652	C-CERAMIC,CHIP;470nF,+80-20%,16V,Y5V,TP,	
SC13	AG000512	2203-001652	C-CERAMIC,CHIP;470nF,+80-20%,16V,Y5V,TP,	
SC16	AG000230	2203-001656	C-CERAMIC,CHIP;0.47nF,5%,50V,NP0,TP,1608	
SC15	AG000230	2203-001656	C-CERAMIC,CHIP;0.47nF,5%,50V,NP0,TP,1608	
SC22	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
SC23	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
SC24	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
SC25	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
SC26	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
SC21	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
RC43	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
RC44	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
RC8	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
SC17	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
SC18	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
SC27	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
SC40	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
SC5	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
SC8	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
SC9	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
VC2	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
SC4	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
SC31	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
SC32	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
SC37	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
SC38	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
SC39	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
RC41	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
PC12	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
PC14	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
PC4	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
PC8	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
PC9	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
PC1	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
LC1	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
LC2	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
LC3	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
MC7	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
MC8	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
RC1	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
RC30	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
RC35	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
RC36	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
RC4	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	

LOCATION	TOSHIBA PART NO.	SAMSUNG CODE NO.	Description;Specification	REMARK
RC40	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
RC3	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
RC11	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
RC2	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
RC23	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
RC28	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
RC29	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
C72	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
C75	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
C76	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
C77	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
C78	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
C81	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
C63	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
C64	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
C65	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
C67	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
C68	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
C71	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
C95	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
C96	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
C98	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
C99	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
DC1	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
DC13	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
C82	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
C83	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
C84	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
C85	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
C87	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
C89	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
C100	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
C102	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
C103	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
C104	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
C106	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
C107	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
DC6	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
DC5	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
AC3	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
AC5	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
AC7	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
AC9	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
C39	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
C56	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
C58	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
C60	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
C61	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
C62	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
C108	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
C109	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
C110	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
C111	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
C113	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
C119	AG000232	2203-005005	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
MC6	AG000233	2203-005065	C-CERAMIC,CHIP;1000nF,+80-20%,10V,Y5V,TP	
C48	AG000233	2203-005065	C-CERAMIC,CHIP;1000nF,+80-20%,10V,Y5V,TP	
C43	AG000233	2203-005065	C-CERAMIC,CHIP;1000nF,+80-20%,10V,Y5V,TP	
C90	AG000270	2402-000009	C-AL,SMD;47uF,20%,6.3V,GP,TP,5.3x5.3x5.	
C88	AG000270	2402-000009	C-AL,SMD;47uF,20%,6.3V,GP,TP,5.3x5.3x5.	
C73	AG000270	2402-000009	C-AL,SMD;47uF,20%,6.3V,GP,TP,5.3x5.3x5.	
C70	AG000270	2402-000009	C-AL,SMD;47uF,20%,6.3V,GP,TP,5.3x5.3x5.	
PC11	AG000270	2402-000009	C-AL,SMD;47uF,20%,6.3V,GP,TP,5.3x5.3x5.	
RC34	AG000270	2402-000009	C-AL,SMD;47uF,20%,6.3V,GP,TP,5.3x5.3x5.	
RC37	AG000270	2402-000009	C-AL,SMD;47uF,20%,6.3V,GP,TP,5.3x5.3x5.	
RC45	AG000270	2402-000009	C-AL,SMD;47uF,20%,6.3V,GP,TP,5.3x5.3x5.	
AC38	AG000270	2402-000009	C-AL,SMD;47uF,20%,6.3V,GP,TP,5.3x5.3x5.	
AC4	AG000270	2402-000009	C-AL,SMD;47uF,20%,6.3V,GP,TP,5.3x5.3x5.	
AC6	AG000270	2402-000009	C-AL,SMD;47uF,20%,6.3V,GP,TP,5.3x5.3x5.	
C105	AG000270	2402-000009	C-AL,SMD;47uF,20%,6.3V,GP,TP,5.3x5.3x5.	
C69	AG000270	2402-000009	C-AL,SMD;47uF,20%,6.3V,GP,TP,5.3x5.3x5.	
C66	AG000270	2402-000009	C-AL,SMD;47uF,20%,6.3V,GP,TP,5.3x5.3x5.	
C40	AG000270	2402-000009	C-AL,SMD;47uF,20%,6.3V,GP,TP,5.3x5.3x5.	
C38	AG000270	2402-000009	C-AL,SMD;47uF,20%,6.3V,GP,TP,5.3x5.3x5.	
VC1	AG000271	2402-000107	C-AL,SMD;100uF,20%,6.3V,GP,TP,6.6x6.6x5	
RC7	AG000271	2402-000107	C-AL,SMD;100uF,20%,6.3V,GP,TP,6.6x6.6x5	
RC20	AG000271	2402-000107	C-AL,SMD;100uF,20%,6.3V,GP,TP,6.6x6.6x5	
PC13	AG000271	2402-000107	C-AL,SMD;100uF,20%,6.3V,GP,TP,6.6x6.6x5	
PC10	AG000271	2402-000107	C-AL,SMD;100uF,20%,6.3V,GP,TP,6.6x6.6x5	
AC40	AG000272	2402-000176	C-AL,SMD;10uF,20%,16V,GP,TP,4.3x4.3x5.4	
AC39	AG000272	2402-000176	C-AL,SMD;10uF,20%,16V,GP,TP,4.3x4.3x5.4	
AC36	AG000272	2402-000176	C-AL,SMD;10uF,20%,16V,GP,TP,4.3x4.3x5.4	
AC8	AG000272	2402-000176	C-AL,SMD;10uF,20%,16V,GP,TP,4.3x4.3x5.4	
C11	AG000272	2402-000176	C-AL,SMD;10uF,20%,16V,GP,TP,4.3x4.3x5.4	
C74	AG000272	2402-000176	C-AL,SMD;10uF,20%,16V,GP,TP,4.3x4.3x5.4	
AC10	AG000272	2402-000176	C-AL,SMD;10uF,20%,16V,GP,TP,4.3x4.3x5.4	
AC14	AG000272	2402-000176	C-AL,SMD;10uF,20%,16V,GP,TP,4.3x4.3x5.4	
AC17	AG000272	2402-000176	C-AL,SMD;10uF,20%,16V,GP,TP,4.3x4.3x5.4	
AC28	AG000272	2402-000176	C-AL,SMD;10uF,20%,16V,GP,TP,4.3x4.3x5.4	
AC24	AG000272	2402-000176	C-AL,SMD;10uF,20%,16V,GP,TP,4.3x4.3x5.4	
AC21	AG000272	2402-000176	C-AL,SMD;10uF,20%,16V,GP,TP,4.3x4.3x5.4	
PC2	AG000273	2402-001042	C-AL,SMD;100uF,20%,16V,GP,TP,6.6x6.6x5.	
PC3	AG000274	2402-001059	C-AL,SMD;220UF,20%,6.3V,-,TP,6X6.6X6.6	

LOCATION	TOSHIBA PART NO.	SAMSUNG CODE NO.	Description;Specification	REMARK
SC3	AG000274	2402-001059	C-AL,SMD;220UF,20%,6.3V,-,TP,6X6.6X6.6	
VL1	AG000278	2703-000125	INDUCTOR-SMD;10uH,10%,1.25x2x1.25mm	
DXT1	AG000279	2801-004180	CRYSTAL-SMD;33.8688MHZ,50PPM,28-AAN,12PF	
Y3	AG000280	2801-004284	CRYSTAL-SMD;27MHZ,10PPM,28-AAN,20PF,30OH	
L28	AG000283	3301-001069	BEAD-SMD;AB,1.6x0.8x0.8mm,-,-	
AL9	AG000283	3301-001069	BEAD-SMD;AB,1.6x0.8x0.8mm,-,-	
AL7	AG000283	3301-001069	BEAD-SMD;AB,1.6x0.8x0.8mm,-,-	
L31	AG000283	3301-001069	BEAD-SMD;AB,1.6x0.8x0.8mm,-,-	
R83	AG000283	3301-001069	BEAD-SMD;AB,1.6x0.8x0.8mm,-,-	
RL1	AG000283	3301-001069	BEAD-SMD;AB,1.6x0.8x0.8mm,-,-	
RL2	AG000283	3301-001069	BEAD-SMD;AB,1.6x0.8x0.8mm,-,-	
AL6	AG000283	3301-001069	BEAD-SMD;AB,1.6x0.8x0.8mm,-,-	
AL16	AG000283	3301-001069	BEAD-SMD;AB,1.6x0.8x0.8mm,-,-	
AL17	AG000283	3301-001069	BEAD-SMD;AB,1.6x0.8x0.8mm,-,-	
AL19	AG000283	3301-001069	BEAD-SMD;AB,1.6x0.8x0.8mm,-,-	
AL2	AG000283	3301-001069	BEAD-SMD;AB,1.6x0.8x0.8mm,-,-	
AL5	AG000283	3301-001069	BEAD-SMD;AB,1.6x0.8x0.8mm,-,-	
AL4	AG000283	3301-001069	BEAD-SMD;AB,1.6x0.8x0.8mm,-,-	
AL20	AG000283	3301-001069	BEAD-SMD;AB,1.6x0.8x0.8mm,-,-	
PL17	AG000284	3301-001495	BEAD-SMD;AB,120OHM,2.0X1.2X0.9MM,2500MA	
PL18	AG000284	3301-001495	BEAD-SMD;AB,120OHM,2.0X1.2X0.9MM,2500MA	
PL19	AG000284	3301-001495	BEAD-SMD;AB,120OHM,2.0X1.2X0.9MM,2500MA	
PL3	AG000284	3301-001495	BEAD-SMD;AB,120OHM,2.0X1.2X0.9MM,2500MA	
PL7	AG000284	3301-001495	BEAD-SMD;AB,120OHM,2.0X1.2X0.9MM,2500MA	
PL8	AG000284	3301-001495	BEAD-SMD;AB,120OHM,2.0X1.2X0.9MM,2500MA	
VL3	AG000284	3301-001495	BEAD-SMD;AB,120OHM,2.0X1.2X0.9MM,2500MA	
PL13	AG000284	3301-001495	BEAD-SMD;AB,120OHM,2.0X1.2X0.9MM,2500MA	
AL18	AG000284	3301-001495	BEAD-SMD;AB,120OHM,2.0X1.2X0.9MM,2500MA	
AL21	AG000284	3301-001495	BEAD-SMD;AB,120OHM,2.0X1.2X0.9MM,2500MA	
ASL1	AG000284	3301-001495	BEAD-SMD;AB,120OHM,2.0X1.2X0.9MM,2500MA	
L40	AG000284	3301-001495	BEAD-SMD;AB,120OHM,2.0X1.2X0.9MM,2500MA	
L41	AG000284	3301-001495	BEAD-SMD;AB,120OHM,2.0X1.2X0.9MM,2500MA	
PL1	AG000284	3301-001495	BEAD-SMD;AB,120OHM,2.0X1.2X0.9MM,2500MA	
PL10	AG000284	3301-001495	BEAD-SMD;AB,120OHM,2.0X1.2X0.9MM,2500MA	
AJS1	AG000298	3708-001615	CONNECTOR-FPC/FFC/PIC;24P,1MM,SMD-S,SN	
AJ1	AG000300	3708-001805	CONNECTOR-FPC/FFC/PIC;20P,1MM,SMD-A,SN	
RCN1	AG000301	3708-001806	CONNECTOR-FPC/FFC/PIC;24P,1MM,SMD-A,SN	
CN3	AG000313	3711-002533	CONNECTOR-HEADER;BOX,5P,1R,2MM,ANGLE,SN,	
MJ4	AG000318	3711-005160	CONNECTOR-HEADER;BOX,6P,1R,2MM,SMD-S,SN,	
PCN1	AG000320	3711-005307	CONNECTOR-HEADER;BOX,8P,1R,2MM,SMD-S,TIN	
U13	AG000351	AH09-00095A	IC MICOM;ES6028FW,SD43,208PIN,3,3V,27MH	
PCB	AG000377	AH41-00571A	PCB;HT-DB300,EOPXY,4,-,1.20T,143.5 SNA	
	AG000557	**AH92-01714B**	**ASSY PCB;SD43,DSP PCB ASSY(E)**	
OJACK	AG000052	0603-001126	OPTIC TRANSMITTER;5V,13.2MB/S,5M,-14.5DB	
UW4	AG000295	3708-001195	CONNECTOR-FPC/FFC/PIC;27P,1.25mm,STRAIGH	
UW6	AG000297	3708-001574	CONNECTOR-FPC/FFC/PIC;24P,1mm,ANGLE,SN	
UW2	AG000302	3710-001421	CONNECTOR-SOCKET;14P,1R,2mm,ANGLE,SN	
UW1	AG000302	3710-001421	CONNECTOR-SOCKET;14P,1R,2mm,ANGLE,SN	
UW12	AG000304	3710-001734	CONNECTOR-SOCKET;15P,1R,2MM,STRAIGHT,-	
UW11	AG000304	3710-001734	CONNECTOR-SOCKET;15P,1R,2MM,STRAIGHT,-	
UW3	AG000305	3710-001868	CONNECTOR-SOCKET;6P,1R,2MM,ANGLE,-	
UW7	AG000306	3710-001973	CONNECTOR-SOCKET;15P,1R,2MM,ANGLE,-,-	
UW8	AG000306	3710-001973	CONNECTOR-SOCKET;15P,1R,2MM,ANGLE,-,-	
UW10	AG000308	3711-000426	CONNECTOR-HEADER;3WALL,15P,1R,2mm,STRAIG	
UW9	AG000308	3711-000426	CONNECTOR-HEADER;3WALL,15P,1R,2mm,STRAIG	
NW11	AG000310	3711-000820	CONNECTOR-HEADER;BOX,2P,1R,2.5MM,STRAIGH	
VD1	AG000012	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
VZD1	AG000024	0403-000372	DIODE-ZENER;UZ9.1BM,9.1V,8.7-9.4V,500mW,	
VQ5	AG000034	0501-000303	TR-SMALL SIGNAL;KSA733,PNP,250mW,TO-92,T	
VQ6	AG000037	0501-000341	TR-SMALL SIGNAL;KSC1623-L,NPN,200mW,SOT-	
VQ10	AG000040	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
VQ7L	AG000040	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
VQ7R	AG000040	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
VQ1	AG000491	0501-000637	TR-SMALL SIGNAL;2SC1740S,NPN,300mW,SPT,T	
VQ9R	AG000492	0501-002436	TR-SMALL SIGNAL;KTC2874-B,NPN,625MW,TO-9	
VQ9L	AG000492	0501-002436	TR-SMALL SIGNAL;KTC2874-B,NPN,625MW,TO-9	
VQ8L	AG000492	0501-002436	TR-SMALL SIGNAL;KTC2874-B,NPN,625MW,TO-9	
VQ8L	AG000492	0501-002436	TR-SMALL SIGNAL;KTC2874-B,NPN,625MW,TO-9	
VQ3	AG000046	0504-000118	TR-DIGITAL;KSR1003,NPN,300MW,22K/22K,TO-	
VQ2	AG000046	0504-000118	TR-DIGITAL;KSR1003,NPN,300MW,22K/22K,TO-	
VQ4	AG000048	0504-000156	TR-DIGITAL;KSR2103,PNP,200MW,22K/22K,SOT	
VQ11	AG000049	0504-001003	TR-DIGITAL;KSR2003,PNP,300MW,22K/22K,TO-	
VQ6	AG000049	0504-001003	TR-DIGITAL;KSR2003,PNP,300MW,22K/22K,TO-	
UIC500	AG000057	0904-001316	IC-I/O CONTROLLER;M66010,24BIT,SOP,32P,2	
SIC1	AG000067	1201-000163	IC-OP AMP;4560,SOP,8P,173MIL,DUAL,100V/m	
RIC2	AG000067	1201-000163	IC-OP AMP;4560,SOP,8P,173MIL,DUAL,100V/m	
RIC1	AG000067	1201-000163	IC-OP AMP;4560,SOP,8P,173MIL,DUAL,100V/m	
KIC1	AG000067	1201-000163	IC-OP AMP;4560,SOP,8P,173MIL,DUAL,100V/m	
HZC1	AG000067	1201-000163	IC-OP AMP;4560,SOP,8P,173MIL,DUAL,100V/m	
CIC1	AG000067	1201-000163	IC-OP AMP;4560,SOP,8P,173MIL,DUAL,100V/m	
CIC2	AG000067	1201-000163	IC-OP AMP;4560,SOP,8P,173MIL,DUAL,100V/m	
FIC2	AG000067	1201-000163	IC-OP AMP;4560,SOP,8P,173MIL,DUAL,100V/m	
FIC4	AG000067	1201-000163	IC-OP AMP;4560,SOP,8P,173MIL,DUAL,100V/m	
FIC3	AG000082	1204-001465	IC-VOLUME/TONE CONT.;TDA7440D,SOP,28,18.	
FIC5	AG000084	1204-002001	IC-VOLUME/TONE CONT.;M62446AFP,SSOP,42P,	
VC60CL	AG000493	2001-000008	R-CARBON;15Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
VC60CR	AG000493	2001-000008	R-CARBON;15Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR2	AG000494	2001-000109	R-CARBON(S);470ohm,5%,1/2W,AA,TP,2.4x6.4	
VR81	AG000091	2001-000241	R-CARBON;1.5Kohm,5%,1/8W,AA,TP,1.8x3.2m	
VR17	AG000495	2001-000273	R-CARBON;100Kohm,5%,1/8W,AA,TP,1.8x3.2m	
VR49L	AG000094	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR48R	AG000094	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	

LOCATION	TOSHIBA PART NO.	SAMSUNG CODE NO.	Description;Specification	REMARK
VR48L	AG000094	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR49R	AG000094	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR52L	AG000094	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR52R	AG000094	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR37	AG000094	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
VC60FL	AG000094	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
VC60FR	AG000094	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
VC60RL	AG000094	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
VC60RL	AG000094	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR1	AG000094	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR36	AG000094	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR34	AG000496	2001-000302	R-CARBON;10ohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR33	AG000496	2001-000302	R-CARBON;10ohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR29	AG000496	2001-000302	R-CARBON;10ohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR87	AG000097	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR80	AG000097	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR7	AG000097	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR6	AG000097	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
FR45	AG000097	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR4	AG000097	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR5	AG000097	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR86	AG000098	2001-000449	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
VR55R	AG000497	2001-000515	R-CARBON;220ohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR55L	AG000497	2001-000515	R-CARBON;220ohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR54R	AG000497	2001-000515	R-CARBON;220ohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR54L	AG000497	2001-000515	R-CARBON;220ohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR19	AG000497	2001-000515	R-CARBON;220ohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR88	AG000100	2001-000522	R-CARBON;22Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
VC60WR	AG000100	2001-000522	R-CARBON;22Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
VC60WL	AG000100	2001-000522	R-CARBON;22Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR50R	AG000101	2001-000591	R-CARBON;3.3Kohm,5%,1/8W,AA,TP,1.8x3.2m	
VR50L	AG000101	2001-000591	R-CARBON;3.3Kohm,5%,1/8W,AA,TP,1.8x3.2m	
VR15	AG000101	2001-000591	R-CARBON;3.3Kohm,5%,1/8W,AA,TP,1.8x3.2m	
VR51L	AG000498	2001-000613	R-CARBON;3.9Kohm,5%,1/8W,AA,TP,1.8x3.2m	
VR51R	AG000498	2001-000613	R-CARBON;3.9Kohm,5%,1/8W,AA,TP,1.8x3.2m	
VR9	AG000102	2001-000645	R-CARBON;330Kohm,5%,1/8W,AA,TP,1.8x3.2m	
VR10	AG000102	2001-000645	R-CARBON;330Kohm,5%,1/8W,AA,TP,1.8x3.2m	
VR18	AG000499	2001-000734	R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x3.2m	
VR44R	AG000500	2001-000780	R-CARBON;470ohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR44L	AG000500	2001-000780	R-CARBON;470ohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR31	AG000500	2001-000780	R-CARBON;470ohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR83	AG000501	2001-000786	R-CARBON;47Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR82	AG000501	2001-000786	R-CARBON;47Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR53R	AG000501	2001-000786	R-CARBON;47Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR53L	AG000501	2001-000786	R-CARBON;47Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR46R	AG000501	2001-000786	R-CARBON;47Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR46L	AG000501	2001-000786	R-CARBON;47Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR56R	AG000502	2001-000857	R-CARBON;560ohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR56L	AG000502	2001-000857	R-CARBON;560ohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR16	AG000502	2001-000857	R-CARBON;560ohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR35	AG000108	2001-000938	R-CARBON;68ohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR25	AG000109	2001-000969	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR24	AG000109	2001-000969	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR23	AG000109	2001-000969	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR26	AG000109	2001-000969	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR28	AG000109	2001-000969	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR30	AG000109	2001-000969	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR22	AG000109	2001-000969	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR11	AG000109	2001-000969	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR12	AG000109	2001-000969	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR13	AG000109	2001-000969	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR21	AG000109	2001-000969	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR20	AG000109	2001-000969	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR14	AG000109	2001-000969	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
FR31	AG000110	2001-001077	R-CARBON(S);150ohm,5%,1/2W,AA,TP,2.4x6.4	
FR32	AG000110	2001-001077	R-CARBON(S);150ohm,5%,1/2W,AA,TP,2.4x6.4	
OR1	AG000148	2007-000290	R-CHIP;100ohm,5%,1/8W,TP,2012	
FR41	AG000148	2007-000290	R-CHIP;100ohm,5%,1/8W,TP,2012	
FR14	AG000148	2007-000290	R-CHIP;100ohm,5%,1/8W,TP,2012	
FR13	AG000148	2007-000290	R-CHIP;100ohm,5%,1/8W,TP,2012	
VC22	AG000507	2201-000163	C-CERAMIC,DISC;10NF,+80-20%,50V,Y5V,TP,7	
VC21	AG000507	2201-000163	C-CERAMIC,DISC;10NF,+80-20%,50V,Y5V,TP,7	
VC92	AG000508	2201-000368	C-CERAMIC,DISC;0.22NF,10%,50V,SL,TP,6.5X	
VC91	AG000508	2201-000368	C-CERAMIC,DISC;0.22NF,10%,50V,SL,TP,6.5X	
VC98	AG000194	2201-000783	C-CERAMIC,DISC;100NF,+80-20%,50V,Y5V,TP,	
VC84	AG000194	2201-000783	C-CERAMIC,DISC;100NF,+80-20%,50V,Y5V,TP,	
VC5	AG000194	2201-000783	C-CERAMIC,DISC;100NF,+80-20%,50V,Y5V,TP,	
VC28	AG000194	2201-000783	C-CERAMIC,DISC;100NF,+80-20%,50V,Y5V,TP,	
VC2	AG000194	2201-000783	C-CERAMIC,DISC;100NF,+80-20%,50V,Y5V,TP,	
VC24	AG000194	2201-000783	C-CERAMIC,DISC;100NF,+80-20%,50V,Y5V,TP,	
VC25	AG000194	2201-000783	C-CERAMIC,DISC;100NF,+80-20%,50V,Y5V,TP,	
VC12	AG000509	2202-000780	C-CERAMIC,MLC-AXIAL;100nF,+80-20%,50V,Y5	
VC13	AG000509	2202-000780	C-CERAMIC,MLC-AXIAL;100nF,+80-20%,50V,Y5	
FC24R	AG000206	2203-000533	C-CERAMIC,CHIP;2.7nF,10%,50V,X7R,TP,2012	
RC12L	AG000206	2203-000533	C-CERAMIC,CHIP;2.7nF,10%,50V,X7R,TP,2012	
RC12R	AG000206	2203-000533	C-CERAMIC,CHIP;2.7nF,10%,50V,X7R,TP,2012	
RC7L	AG000206	2203-000533	C-CERAMIC,CHIP;2.7nF,10%,50V,X7R,TP,2012	
RC7R	AG000206	2203-000533	C-CERAMIC,CHIP;2.7nF,10%,50V,X7R,TP,2012	
CC11	AG000206	2203-000533	C-CERAMIC,CHIP;2.7nF,10%,50V,X7R,TP,2012	
CC7	AG000206	2203-000533	C-CERAMIC,CHIP;2.7nF,10%,50V,X7R,TP,2012	
FC11L	AG000206	2203-000533	C-CERAMIC,CHIP;2.7nF,10%,50V,X7R,TP,2012	
FC11R	AG000206	2203-000533	C-CERAMIC,CHIP;2.7nF,10%,50V,X7R,TP,2012	
FC24L	AG000206	2203-000533	C-CERAMIC,CHIP;2.7nF,10%,50V,X7R,TP,2012	

LOCATION	TOSHIBA PART NO.	SAMSUNG CODE NO.	Description;Specification	REMARK
UC1A	AG000214	2203-000979	C-CERAMIC,CHIP;47nF,10%,50V,X7R,TP,2012	
FC2R	AG000224	2203-001551	C-CERAMIC,CHIP;1.5nF,10%,50V,X7R,TP,2012	
FC2R	AG000224	2203-001551	C-CERAMIC,CHIP;1.5nF,10%,50V,X7R,TP,2012	
FC2L	AG000224	2203-001551	C-CERAMIC,CHIP;1.5nF,10%,50V,X7R,TP,2012	
FC2L	AG000224	2203-001551	C-CERAMIC,CHIP;1.5nF,10%,50V,X7R,TP,2012	
CC2	AG000224	2203-001551	C-CERAMIC,CHIP;1.5nF,10%,50V,X7R,TP,2012	
FC26R	AG000246	2401-000752	C-AL;220nF,20%,50V,GP,3*5,2.5MM,TP	
RC11L	AG000246	2401-000752	C-AL;220nF,20%,50V,GP,3*5,2.5MM,TP	
RC11R	AG000246	2401-000752	C-AL;220nF,20%,50V,GP,3*5,2.5MM,TP	
RC14L	AG000246	2401-000752	C-AL;220nF,20%,50V,GP,3*5,2.5MM,TP	
RC14R	AG000246	2401-000752	C-AL;220nF,20%,50V,GP,3*5,2.5MM,TP	
RC8L	AG000246	2401-000752	C-AL;220nF,20%,50V,GP,3*5,2.5MM,TP	
RC8R	AG000246	2401-000752	C-AL;220nF,20%,50V,GP,3*5,2.5MM,TP	
FC26L	AG000246	2401-000752	C-AL;220nF,20%,50V,GP,3*5,2.5MM,TP	
CC10	AG000246	2401-000752	C-AL;220nF,20%,50V,GP,3*5,2.5MM,TP	
CC13	AG000246	2401-000752	C-AL;220nF,20%,50V,GP,3*5,2.5MM,TP	
CC8	AG000246	2401-000752	C-AL;220nF,20%,50V,GP,3*5,2.5MM,TP	
FC16L	AG000246	2401-000752	C-AL;220nF,20%,50V,GP,3*5,2.5MM,TP	
FC23R	AG000246	2401-000752	C-AL;220nF,20%,50V,GP,3*5,2.5MM,TP	
FC23L	AG000246	2401-000752	C-AL;220nF,20%,50V,GP,3*5,2.5MM,TP	
FC16R	AG000246	2401-000752	C-AL;220nF,20%,50V,GP,3*5,2.5MM,TP	
VC60FR	AG000250	2401-000909	C-AL;22uF,20%,16V,GP,TP,5x5,2.5	
VC60RL	AG000250	2401-000909	C-AL;22uF,20%,16V,GP,TP,5x5,2.5	
VC60RR	AG000250	2401-000909	C-AL;22uF,20%,16V,GP,TP,5x5,2.5	
VC60WL	AG000250	2401-000909	C-AL;22uF,20%,16V,GP,TP,5x5,2.5	
VC60WR	AG000250	2401-000909	C-AL;22uF,20%,16V,GP,TP,5x5,2.5	
VC33L	AG000250	2401-000909	C-AL;22uF,20%,16V,GP,TP,5x5,2.5	
VC33R	AG000250	2401-000909	C-AL;22uF,20%,16V,GP,TP,5x5,2.5	
VC60CL	AG000250	2401-000909	C-AL;22uF,20%,16V,GP,TP,5x5,2.5	
VC60CR	AG000250	2401-000909	C-AL;22uF,20%,16V,GP,TP,5x5,2.5	
VC60FL	AG000250	2401-000909	C-AL;22uF,20%,16V,GP,TP,5x5,2.5	
VC18	AG000252	2401-001102	C-AL;330uF,20%,16V,GP,TP,8x11.5mm,5	
VC19	AG000252	2401-001102	C-AL;330uF,20%,16V,GP,TP,8x11.5mm,5	
VC20	AG000252	2401-001102	C-AL;330uF,20%,16V,GP,TP,8x11.5mm,5	
VC17	AG000252	2401-001102	C-AL;330uF,20%,16V,GP,TP,8x11.5mm,5	
VC16	AG000252	2401-001102	C-AL;330uF,20%,16V,GP,TP,8x11.5mm,5	
VC15	AG000252	2401-001102	C-AL;330uF,20%,16V,GP,TP,8x11.5mm,5	
VC14	AG000252	2401-001102	C-AL;330uF,20%,16V,GP,TP,8x11.5mm,5	
VC23	AG000252	2401-001102	C-AL;330uF,20%,16V,GP,TP,8x11.5mm,5	
VC1	AG000258	2401-001538	C-AL;47uF,20%,25V,GP,TP,5x11mm,5mm	
VC27	AG000513	2401-001572	C-AL;47uF,20%,50V,GP,TP,6.3x11mm,5m	
VC26	AG000513	2401-001572	C-AL;47uF,20%,50V,GP,TP,6.3x11mm,5m	
VC99	AG000259	2401-001893	C-AL;100uF,20%,16V,GP,6*7,5MM,TP	
VC9	AG000259	2401-001893	C-AL;100uF,20%,16V,GP,6*7,5MM,TP	
VC83	AG000259	2401-001893	C-AL;100uF,20%,16V,GP,6*7,5MM,TP	
VC8	AG000259	2401-001893	C-AL;100uF,20%,16V,GP,6*7,5MM,TP	
VC7	AG000259	2401-001893	C-AL;100uF,20%,16V,GP,6*7,5MM,TP	
VC10	AG000259	2401-001893	C-AL;100uF,20%,16V,GP,6*7,5MM,TP	
VC80	AG000260	2401-001912	C-AL;1uF,20%,50V,GP,5*11,5mm,TP	
VC4	AG000260	2401-001912	C-AL;1uF,20%,50V,GP,5*11,5mm,TP	
VC6	AG000263	2401-001954	C-AL;4.7uF,20%,50V,GP,TP,5x11mm,5mm	
VC84	AG000263	2401-001954	C-AL;4.7uF,20%,50V,GP,TP,5x11mm,5mm	
VC85	AG000263	2401-001954	C-AL;4.7uF,20%,50V,GP,TP,5x11mm,5mm	
FC41	AG000266	2401-001994	C-AL;3.3UF,20%,50V,BP,TP,5X11MM,5	
FC42	AG000266	2401-001994	C-AL;3.3UF,20%,50V,BP,TP,5X11MM,5	
SC18	AG000269	2401-003336	C-AL;4.7UF,20%,50V,GP,TP,5X5,2	
PCB	AG000379	AH41-00581A	PCB;HT-DM150N,PHENOL,1,0,-,1.6T 33	SNA
	AG000558	**AH92-01715B**	**ASSY PCB;HT-DM150N,SCART JACK PCB ASSY**	
VIC2	AG000059	1001-001173	IC-RF AUDIO SWITCH;BA7612F;-,SOIC,8P,173	
VIC3	AG000067	1201-000163	IC-OP AMP;4560,SOP,8P,173MIL,DUAL,100V/m	
VIC4	AG000067	1201-000163	IC-OP AMP;4560,SOP,8P,173MIL,DUAL,100V/m	
VIC1	AG000071	1201-001922	IC-VIDEO AMP;BA7665FS,SSOP,16P,6.6X4.4MM	
VW5	AG000294	3708-000412	CONNECTOR-FPC/FFC/PIC;12P,1.25mm,ANGLE,	
VW3	AG000299	3708-001760	CONNECTOR-FPC/FFC/PIC;20P,1MM,STRAIGHT,S	
VW4-4	AG000311	3711-000968	CONNECTOR-HEADER;BOX,4P,1R,2mm,STRAIGHT,	
VW1	AG000321	3711-005404	CONNECTOR-HEADER;3WALL,15P,1R,2MM,STRAIG	
VW2	AG000321	3711-005404	CONNECTOR-HEADER;3WALL,15P,1R,2MM,STRAIG	
JK3	AG000517	3722-001682	JACK-SCART;21P,-,SN,BLK,-	
JK1	AG000325	3722-001693	JACK-PIN;3P,8.3PI,NI-P,GRN/BLK/RED,-	
JK2	AG000327	3722-001894	JACK-DIN;4P,-,SN,BLK,-	
VWS1	AG000526	AH34-00015A	SWITCH SLIDE;KSA-2272AB,SLIDE,-,-,50V,0.	
JK4	AG000527	AH37-00005A	JACK—RCA;1P,S-440B,YELLOW,-,SHIELD PLAT	
VW4-1	AG000530	AH39-20561V	LEAD CONNECTOR ASSY;-,5295,51004,4P,150M	
VD1	AG000012	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
VZD1	AG000024	0403-000372	DIODE-ZENER;UZ9.1BM,9.1V,8.7-9.4V,500mW,	
VQ5	AG000034	0501-000303	TR-SMALL SIGNAL;KSA733,PNP,250mW,TO-92,T	
VQ7R	AG000040	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
VQ7L	AG000040	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
VQ10	AG000040	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
VQ1	AG000491	0501-000637	TR-SMALL SIGNAL;2SC1740S,NPN,300mW,SPT,T	
VQ9R	AG000492	0501-002436	TR-SMALL SIGNAL;KTC2874-B,NPN,625MW,TO-9	
VQ9L	AG000492	0501-002436	TR-SMALL SIGNAL;KTC2874-B,NPN,625MW,TO-9	
VQ8R	AG000492	0501-002436	TR-SMALL SIGNAL;KTC2874-B,NPN,625MW,TO-9	
VQ8L	AG000492	0501-002436	TR-SMALL SIGNAL;KTC2874-B,NPN,625MW,TO-9	
VQ3	AG000046	0504-000118	TR-DIGITAL;KSR1003,NPN,300MW,22K/22K,TO-	
VQ2	AG000046	0504-000118	TR-DIGITAL;KSR1003,NPN,300MW,22K/22K,TO-	
VQ11	AG000049	0504-001003	TR-DIGITAL;KSR2003,PNP,300MW,22K/22K,TO-	
VQ6	AG000049	0504-001003	TR-DIGITAL;KSR2003,PNP,300MW,22K/22K,TO-	
VC60CR	AG000493	2001-000008	R-CARBON;15Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
VC60CL	AG000493	2001-000008	R-CARBON;15Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR2	AG000087	2001-000022	R-CARBON(S);33OHM,5%,1/2W,AA,TP,2.4X6.4M	
VR14	AG000091	2001-000241	R-CARBON;1.5Kohm,5%,1/8W,AA,TP,1.8x3.2m	

LOCATION	TOSHIBA PART NO.	SAMSUNG CODE NO.	Description;Specification	REMARK
VR81	AG000091	2001-000241	R-CARBON;1.5Kohm,5%,1/8W,AA,TP,1.8x3.2m	
VR17	AG000495	2001-000273	R-CARBON;100Kohm,5%,1/8W,AA,TP,1.8x3.2m	
VR48L	AG000094	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR48R	AG000094	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR49L	AG000094	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR49R	AG000094	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR52L	AG000094	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR52R	AG000094	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR37	AG000094	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
VC60FL	AG000094	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
VC60FR	AG000094	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
VC60RL	AG000094	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
VC60RR	AG000094	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR1	AG000094	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR36	AG000094	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR34	AG000496	2001-000302	R-CARBON;10ohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR33	AG000496	2001-000302	R-CARBON;10ohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR29	AG000496	2001-000302	R-CARBON;10ohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR87	AG000097	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR80	AG000097	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR7	AG000097	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR6	AG000097	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR12	AG000097	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR4	AG000097	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR5	AG000097	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR86	AG000098	2001-000449	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
VR55R	AG000497	2001-000515	R-CARBON;220ohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR55L	AG000497	2001-000515	R-CARBON;220ohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR54R	AG000497	2001-000515	R-CARBON;220ohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR54L	AG000497	2001-000515	R-CARBON;220ohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR19	AG000497	2001-000515	R-CARBON;220ohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR88	AG000100	2001-000522	R-CARBON;22Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
VC60WR	AG000100	2001-000522	R-CARBON;22Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
VC60WL	AG000100	2001-000522	R-CARBON;22Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR50R	AG000101	2001-000591	R-CARBON;3.3Kohm,5%,1/8W,AA,TP,1.8x3.2m	
VR50L	AG000101	2001-000591	R-CARBON;3.3Kohm,5%,1/8W,AA,TP,1.8x3.2m	
VR15	AG000101	2001-000591	R-CARBON;3.3Kohm,5%,1/8W,AA,TP,1.8x3.2m	
VR51L	AG000498	2001-000613	R-CARBON;3.9Kohm,5%,1/8W,AA,TP,1.8x3.2m	
VR51R	AG000498	2001-000613	R-CARBON;3.9Kohm,5%,1/8W,AA,TP,1.8x3.2m	
VR10	AG000102	2001-000645	R-CARBON;330Kohm,5%,1/8W,AA,TP,1.8x3.2m	
VR9	AG000102	2001-000645	R-CARBON;330Kohm,5%,1/8W,AA,TP,1.8x3.2m	
VR16	AG000499	2001-000734	R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x3.2m	
VR31	AG000500	2001-000780	R-CARBON;470ohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR44L	AG000500	2001-000780	R-CARBON;470ohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR44R	AG000500	2001-000780	R-CARBON;470ohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR83	AG000501	2001-000786	R-CARBON;47Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR82	AG000501	2001-000786	R-CARBON;47Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR53R	AG000501	2001-000786	R-CARBON;47Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR53L	AG000501	2001-000786	R-CARBON;47Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR46R	AG000501	2001-000786	R-CARBON;47Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR46L	AG000501	2001-000786	R-CARBON;47Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR56R	AG000502	2001-000857	R-CARBON;560ohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR56L	AG000502	2001-000857	R-CARBON;560ohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR18	AG000502	2001-000857	R-CARBON;560ohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR35	AG000108	2001-000938	R-CARBON;68ohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR23	AG000108	2001-000938	R-CARBON;68ohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR24	AG000109	2001-000969	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR25	AG000109	2001-000969	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR26	AG000109	2001-000969	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR28	AG000109	2001-000969	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR30	AG000109	2001-000969	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR11	AG000109	2001-000969	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR13	AG000109	2001-000969	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR20	AG000109	2001-000969	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR21	AG000109	2001-000969	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
VR22	AG000109	2001-000969	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
VC2	AG000506	2201-000146	C-CERAMIC,DISC;0.1NF,5%,50V,SL,TP,5X3.5M	
VC22	AG000507	2201-000163	C-CERAMIC,DISC;10NF,+80-20%,50V,Y5V,TP,7	
VC21	AG000507	2201-000163	C-CERAMIC,DISC;10NF,+80-20%,50V,Y5V,TP,7	
VC11	AG000507	2201-000163	C-CERAMIC,DISC;10NF,+80-20%,50V,Y5V,TP,7	
UC2A	AG000507	2201-000163	C-CERAMIC,DISC;10NF,+80-20%,50V,Y5V,TP,7	
VC1A	AG000507	2201-000163	C-CERAMIC,DISC;10NF,+80-20%,50V,Y5V,TP,7	
VR92	AG000508	2201-000368	C-CERAMIC,DISC;0.22NF,10%,50V,SL,TP,6.5X	
VR91	AG000508	2201-000368	C-CERAMIC,DISC;0.22NF,10%,50V,SL,TP,6.5X	
VC92	AG000508	2201-000368	C-CERAMIC,DISC;0.22NF,10%,50V,SL,TP,6.5X	
VC91	AG000508	2201-000368	C-CERAMIC,DISC;0.22NF,10%,50V,SL,TP,6.5X	
VC5	AG000194	2201-000783	C-CERAMIC,DISC;100NF,+80-20%,50V,Y5V,TP,	
VC84	AG000194	2201-000783	C-CERAMIC,DISC;100NF,+80-20%,50V,Y5V,TP,	
VC98	AG000194	2201-000783	C-CERAMIC,DISC;100NF,+80-20%,50V,Y5V,TP,	
VC28	AG000194	2201-000783	C-CERAMIC,DISC;100NF,+80-20%,50V,Y5V,TP,	
VC25	AG000194	2201-000783	C-CERAMIC,DISC;100NF,+80-20%,50V,Y5V,TP,	
VC24	AG000194	2201-000783	C-CERAMIC,DISC;100NF,+80-20%,50V,Y5V,TP,	
VC13	AG000509	2202-000780	C-CERAMIC,MLC-AXIAL;100nF,+80-20%,50V,Y5	
VC12	AG000509	2202-000780	C-CERAMIC,MLC-AXIAL;100nF,+80-20%,50V,Y5	
VC60FR	AG000250	2401-000909	C-AL;22uF,20%,16V,GP,TP,5x5,2.5	
VC60RL	AG000250	2401-000909	C-AL;22uF,20%,16V,GP,TP,5x5,2.5	
VC60RR	AG000250	2401-000909	C-AL;22uF,20%,16V,GP,TP,5x5,2.5	
VC60WL	AG000250	2401-000909	C-AL;22uF,20%,16V,GP,TP,5x5,2.5	
VC60WR	AG000250	2401-000909	C-AL;22uF,20%,16V,GP,TP,5x5,2.5	
VC33L	AG000250	2401-000909	C-AL;22uF,20%,16V,GP,TP,5x5,2.5	
VC33R	AG000250	2401-000909	C-AL;22uF,20%,16V,GP,TP,5x5,2.5	
VC60CL	AG000250	2401-000909	C-AL;22uF,20%,16V,GP,TP,5x5,2.5	
VC60CR	AG000250	2401-000909	C-AL;22uF,20%,16V,GP,TP,5x5,2.5	

LOCATION	TOSHIBA PART NO.	SAMSUNG CODE NO.	Description;Specification	REMARK
VC60FL	AG000250	2401-000909	C-AL;22uF,20%,16V,GP,TP,5x5,2.5	
VC19	AG000252	2401-001102	C-AL;330uF,20%,16V,GP,TP,8x11.5mm,5	
VC20	AG000252	2401-001102	C-AL;330uF,20%,16V,GP,TP,8x11.5mm,5	
VC23	AG000252	2401-001102	C-AL;330uF,20%,16V,GP,TP,8x11.5mm,5	
VC6	AG000252	2401-001102	C-AL;330uF,20%,16V,GP,TP,8x11.5mm,5	
VC18	AG000252	2401-001102	C-AL;330uF,20%,16V,GP,TP,8x11.5mm,5	
VC17	AG000252	2401-001102	C-AL;330uF,20%,16V,GP,TP,8x11.5mm,5	
VC16	AG000252	2401-001102	C-AL;330uF,20%,16V,GP,TP,8x11.5mm,5	
VC15	AG000252	2401-001102	C-AL;330uF,20%,16V,GP,TP,8x11.5mm,5	
VC14	AG000252	2401-001102	C-AL;330uF,20%,16V,GP,TP,8x11.5mm,5	
VC1	AG000257	2401-001511	C-AL;47uF,20%,16V,GP,6*7,5MM,TP	
VC26	AG000513	2401-001572	C-AL;47uF,20%,50V,GP,TP,6.3x11mm,5m	
VC27	AG000513	2401-001572	C-AL;47uF,20%,50V,GP,TP,6.3x11mm,5m	
VC83	AG000259	2401-001893	C-AL;100uF,20%,16V,GP,6*7,5MM,TP	
VC9	AG000259	2401-001893	C-AL;100uF,20%,16V,GP,6*7,5MM,TP	
VC99	AG000259	2401-001893	C-AL;100uF,20%,16V,GP,6*7,5MM,TP	
VC10	AG000259	2401-001893	C-AL;100uF,20%,16V,GP,6*7,5MM,TP	
VC7	AG000259	2401-001893	C-AL;100uF,20%,16V,GP,6*7,5MM,TP	
VC8	AG000259	2401-001893	C-AL;100uF,20%,16V,GP,6*7,5MM,TP	
VC4	AG000260	2401-001912	C-AL;1uF,20%,50V,GP,5*11,5mm,TP	
VC80	AG000260	2401-001912	C-AL;1uF,20%,50V,GP,5*11,5mm,TP	
VC6	AG000263	2401-001954	C-AL;4.7uF,20%,50V,GP,TP,5x11mm,5mm	
VC85	AG000263	2401-001954	C-AL;4.7uF,20%,50V,GP,TP,5x11mm,5mm	
VC86	AG000263	2401-001954	C-AL;4.7uF,20%,50V,GP,TP,5x11mm,5mm	
VL1	AG000276	2701-000114	INDUCTOR-AXIAL;10uH,10%,2.5x3.4mm	
VL3R	AG000276	2701-000177	INDUCTOR-AXIAL;33uH,10%,2.5x3.4mm	
VL3L	AG000276	2701-000177	INDUCTOR-AXIAL;33uH,10%,2.5x3.4mm	
VL2	AG000276	2701-000177	INDUCTOR-AXIAL;33uH,10%,2.5x3.4mm	
PCB	AG000532	AH41-00583A	PCB;HT-DM150N,PHENOL,1,0,-,1.6T 29	SNA
	AG000559	**AH92-01716D**	**ASSY PCB;HT-DM150N,POWER ASSY,EUROPE**	
RBD1	AG000017	0402-001077	DIODE-BRIDGE;KBP202G,200V,2A,SIP-4	
RIC2	AG000068	1201-000191	IC-OP AMP;4558,DIP,8P,300MIL,DUAL,20V/mV	
RIC1	AG000074	1203-000276	IC-POSI.FIXED REG.;7805,TO-220,3P;-,PLAS	
RR10	AG000505	2003-000606	R-METAL OXIDE(S);270ohm,5%,2W,AA,TP,4x12	
RR3	AG000505	2003-000606	R-METAL OXIDE(S);270ohm,5%,2W,AA,TP,4x12	
RC1	AG000195	2201-002128	C-CERAMIC,DISC;4.7NF,20%,400V,Y5U,BK,15X	
RC2	AG000195	2201-002128	C-CERAMIC,DISC;4.7NF,20%,400V,Y5U,BK,15X	
RC3	AG000195	2201-002128	C-CERAMIC,DISC;4.7NF,20%,400V,Y5U,BK,15X	
RC4	AG000195	2201-002128	C-CERAMIC,DISC;4.7NF,20%,400V,Y5U,BK,15X	
RC6	AG000255	2401-001413	C-AL;470uF,20%,35V,GP,-,10x20,5mm	
RE3	AG000289	3501-001008	RELAY-POWER;12VDC,530MW,10000MA,1FORMC,1	
RE1	AG000290	3501-001254	RELAY-MINIATURE;12VDC,0.25W,10000MA,SPST	
RFU1	AG000515	3601-000216	FUSE-CARTRIDGE;250V,2.5A,TIME-LAG,GLASS,	
RFU3	AG000516	3601-000319	FUSE;-,80mA,-,-,15.5mm	
RCW1	AG000307	3711-000190	CONNECTOR-HEADER;1WALL,2P,1R,7.92MM,STRA	
RCW3	AG000312	3711-001018	CONNECTOR-HEADER;BOX,5P,1R,2mm,STRAIGHT,	
RCW2	AG000316	3711-004848	CONNECTOR-HEADER;BOX,3P,1R,7.92MM,STRAIG	
RPT1	AG000524	AH26-00143N	TRANS POWER;-,SD-43,-,6.276V,24V/9V,0.11	
RL4	AG000358	AH27-00054A	COIL FILTER;HT-DB300,600UH##30%,-,10T,27	
PIC1	AG000405	AH62-30062A	HEAT SINK;AL,-,-,-,-,H30,MQ6T,-	
RD3	AG000012	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
RD7	AG000014	0402-000127	DIODE-RECTIFIER;1N4002,100V,1A,DO-41,TP	
RD1	AG000014	0402-000127	DIODE-RECTIFIER;1N4002,100V,1A,DO-41,TP	
RD2	AG000014	0402-000127	DIODE-RECTIFIER;1N4002,100V,1A,DO-41,TP	
RD4	AG000014	0402-000127	DIODE-RECTIFIER;1N4002,100V,1A,DO-41,TP	
RZD1	AG000021	0403-000354	DIODE-ZENER;UZ5.1B,5.1V,4.8-5.4V,500mW,D	
RQ3	AG000032	0501-000010	TR-SMALL SIGNAL;KSC1008,NPN,800mW,TO-92,	
RR4	AG000090	2001-000050	R-CARBON;2.7Kohm,5%,1/4W,AA,TP,2.4x6.4m	
RR19	AG000097	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
RR5	AG000098	2001-000449	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
RR2	AG000099	2001-000472	R-CARBON;2.7Kohm,5%,1/8W,AA,TP,1.8x3.2m	
RR7	AG000103	2001-000660	R-CARBON;33Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
RR6	AG000106	2001-000890	R-CARBON;6.8Kohm,5%,1/8W,AA,TP,1.8x3.2m	
RR1	AG000503	2001-001095	R-CARBON(S);2.2Mohm,5%,1/2W,AA,TP,2.4x6.	
RR3	AG000111	2001-001163	R-CARBON(S);560ohm,5%,1/2W,AA,TP,2.4x6.4	
RC5	AG000191	2201-000161	C-CERAMIC,DISC;10NF,+80-20%,500V,Y5V,TP,	
RC8	AG000242	2401-000438	C-AL;10UF,20%,25V,GP,-,5X11,5	
RC11	AG000253	2401-001238	C-AL;4.7uF,20%,25V,GP,3*5,2.5MM,TP	
RC10	AG000258	2401-001538	C-AL;47uF,20%,25V,GP,TP,5x11mm,5mm	
RC12	AG000258	2401-001538	C-AL;47uF,20%,25V,GP,TP,5x11mm,5mm	
RC9	AG000263	2401-001954	C-AL;4.7uF,20%,50V,GP,TP,5x11mm,5mm	
RFU1	AG000293	3602-000147	FUSE-CLIP;250V,7.5A,30mohm	
RFU3	AG000293	3602-000147	FUSE-CLIP;250V,7.5A,30mohm	
PCB	AG000382	AH41-00598A	PCB;SD43,PHENOL,1,0,-,1.6T 247X122	SNA
	AG000560	**AH92-01833A**	**ASSY PCB;HT-DM150N,MAIN PCB ASSY,EURO**	
SD1	AG000015	0402-000268	DIODE-RECTIFIER;SB360,60V,3A,DO-201AD,TP	
PBD2	AG000017	0402-001077	DIODE-BRIDGE;KBP202G,200V,2A,SIP-4	
PBD1	AG000018	0402-001258	DIODE-BRIDGE;GBU606,600V,6A,SIP-4,BK	
BD4	AG000018	0402-001258	DIODE-BRIDGE;GBU606,600V,6A,SIP-4,BK	
BD3	AG000018	0402-001258	DIODE-BRIDGE;GBU606,600V,6A,SIP-4,BK	
BD2	AG000018	0402-001258	DIODE-BRIDGE;GBU606,600V,6A,SIP-4,BK	
IC4	AG000072	1203-000110	IC-NEGA.FIXED REG.;7912,TO-220,3P;-,PLAS	
IC8	AG000073	1203-000242	IC-POSI.FIXED REG.;7812,TO-220,3P;-,PLAS	
IC3	AG000073	1203-000242	IC-POSI.FIXED REG.;7812,TO-220,3P;-,PLAS	
PIC3	AG000075	1203-000294	IC-POSI.FIXED REG.;7808,TO-220,3P;-,PLAS	
PIC2	AG000078	1203-002560	IC-POSI.FIXED REG.;NJM7805,TO-220F,3P;-,	
PIC1	AG000079	1203-002744	IC-SWITCH REG.;SI-8050S,TO-220,5P,10X16.	
R99W	AG000113	2003-000471	R-METAL OXIDE(S);10OHM,5%,2W,AA,TP	
R99RR	AG000113	2003-000471	R-METAL OXIDE(S);10OHM,5%,2W,AA,TP	
R99RL	AG000113	2003-000471	R-METAL OXIDE(S);10OHM,5%,2W,AA,TP	
R99FR	AG000113	2003-000471	R-METAL OXIDE(S);10OHM,5%,2W,AA,TP	

LOCATION	TOSHIBA PART NO.	SAMSUNG CODE NO.	Description;Specification	REMARK
R99FL	AG000113	2003-000471	R-METAL OXIDE(S);10OHM,5%,2W,AA,TP	
R99C	AG000113	2003-000471	R-METAL OXIDE(S);10OHM,5%,2W,AA,TP	
R137	AG000114	2003-000502	R-METAL OXIDE(S);150ohm,5%,2W,AA,TP,4x12	
PR1	AG000116	2003-000701	R-METAL OXIDE(S);470ohm,5%,2W,AA,TP,4x12	
R25	AG000116	2003-000701	R-METAL OXIDE(S);470ohm,5%,2W,AA,TP,4x12	
R30	AG000116	2003-000701	R-METAL OXIDE(S);470ohm,5%,2W,AA,TP,4x12	
R45	AG000117	2003-000777	R-METAL OXIDE(S);68ohm,5%,2W,AA,TP,4x12m	
R98C	AG000185	2009-000018	R-METAL PLATE;0.22ohm,10%,5W,CL,TP,5x14x	
R98FL	AG000185	2009-000018	R-METAL PLATE;0.22ohm,10%,5W,CL,TP,5x14x	
R98FR	AG000185	2009-000018	R-METAL PLATE;0.22ohm,10%,5W,CL,TP,5x14x	
R98RL	AG000185	2009-000018	R-METAL PLATE;0.22ohm,10%,5W,CL,TP,5x14x	
R98RR	AG000185	2009-000018	R-METAL PLATE;0.22ohm,10%,5W,CL,TP,5x14x	
R98W	AG000185	2009-000018	R-METAL PLATE;0.22ohm,10%,5W,CL,TP,5x14x	
R97C	AG000185	2009-000018	R-METAL PLATE;0.22ohm,10%,5W,CL,TP,5x14x	
R97FL	AG000185	2009-000018	R-METAL PLATE;0.22ohm,10%,5W,CL,TP,5x14x	
R97FR	AG000185	2009-000018	R-METAL PLATE;0.22ohm,10%,5W,CL,TP,5x14x	
R97W	AG000185	2009-000018	R-METAL PLATE;0.22ohm,10%,5W,CL,TP,5x14x	
R97RR	AG000185	2009-000018	R-METAL PLATE;0.22ohm,10%,5W,CL,TP,5x14x	
R97RL	AG000185	2009-000018	R-METAL PLATE;0.22ohm,10%,5W,CL,TP,5x14x	
PC1	AG000237	2401-000230	C-AL;100uF,20%,100V,GP,TP,12.5x20mm	
PC8	AG000251	2401-001052	C-AL;3300uF,20%,25V,GP,-,16x31.5,7.	
PC5	AG000251	2401-001052	C-AL;3300uF,20%,25V,GP,-,16x31.5,7.	
PC15	AG000251	2401-001052	C-AL;3300uF,20%,25V,GP,-,16x31.5,7.	
C35	AG000254	2401-001361	C-AL;470uF,20%,16V,BP,TP,13x20mm,5m	
C23	AG000264	2401-001959	C-AL;4700uF,20%,25V,GP,TP,18x35.5,7	
C22	AG000264	2401-001959	C-AL;4700uF,20%,25V,GP,TP,18x35.5,7	
C18	AG000267	2401-002258	C-AL;4700uF,20%,50V,GP,-,22x40mm,5m	
C19	AG000267	2401-002258	C-AL;4700uF,20%,50V,GP,-,22x40mm,5m	
C21	AG000268	2401-003116	C-AL;4700uF,20%,35V,-,BK,18X35.5,7.	
C20	AG000268	2401-003116	C-AL;4700uF,20%,35V,-,BK,18X35.5,7.	
PW1	AG000309	3711-000588	CONNECTOR-HEADER;BOX,10P,1R,2.5MM,STRAIG	
CW9	AG000312	3711-001018	CONNECTOR-HEADER;BOX,5P,1R,2mm,STRAIGHT,	
CW5	AG000314	3711-004109	CONNECTOR-HEADER;BOX,14P,1R,2MM,STRAIGHT	
CW7	AG000314	3711-004109	CONNECTOR-HEADER;BOX,14P,1R,2MM,STRAIGHT	
CW3	AG000317	3711-004942	CONNECTOR-HEADER;BOX,7P,1R,3.96MM,STRAIG	
PW3	AG000319	3711-005184	CONNECTOR-HEADER;3WALL,6P,1R,2MM,STRAIGH	
J1	AG000322	3716-001179	TERMINAL-BLOCK;SOLDER,4P,6.3MM,60V,7A	
J2	AG000323	3716-001205	TERMINAL-BLOCK;SOLDER,4P,6.3MM,60V,7A	
J3	AG000328	3722-001925	JACK-PIN;4P/2C,-,NI,RED/RED/WHT/WHT,-	
L7	AG000347	AC27-12001N	COIL-CHOKE;10UH-15%,RA,K-30,Q80,150KHZ	
SIC2	AG000353	AH13-00013A	IC HYBRID;SLA6101,EVE-1,15,-40~150,-,5A,	
RIC1R	AG000353	AH13-00013A	IC HYBRID;SLA6101,EVE-1,15,-40~150,-,5A,	
RIC1L	AG000353	AH13-00013A	IC HYBRID;SLA6101,EVE-1,15,-40~150,-,5A,	
FIC1R	AG000353	AH13-00013A	IC HYBRID;SLA6101,EVE-1,15,-40~150,-,5A,	
FIC1L	AG000353	AH13-00013A	IC HYBRID;SLA6101,EVE-1,15,-40~150,-,5A,	
SIC1	AG000354	AH13-00014A	IC HYBRID;SLA6102,EVE-1,15,-40~150,-,6A,	
L6	AG000357	AH27-00052A	COIL CHOKE;8017PH-151K,HT-DB600,150UH,-,	
L3W	AG000359	AH27-90001A	COIL-SPRING;-,2.2UH,-,-,-,SPRING,-,-,-,-	
L3RR	AG000359	AH27-90001A	COIL-SPRING;-,2.2UH,-,-,-,SPRING,-,-,-,-	
L3RL	AG000359	AH27-90001A	COIL-SPRING;-,2.2UH,-,-,-,SPRING,-,-,-,-	
L3FR	AG000359	AH27-90001A	COIL-SPRING;-,2.2UH,-,-,-,SPRING,-,-,-,-	
L3FL	AG000359	AH27-90001A	COIL-SPRING;-,2.2UH,-,-,-,SPRING,-,-,-,-	
L3C	AG000359	AH27-90001A	COIL-SPRING;-,2.2UH,-,-,-,SPRING,-,-,-,-	
CCON1	AG000363	AH39-00101A	LEAD CONNECTOR ASSY;-,5295,51004,5P,150M	
CW4	AG000366	AH39-00428A	WIRE HARNESS;HT-DM150,-,-,5P,-,-,26AWG,5	
PW4	AG000368	AH39-00465A	LEAD CONNECTOR;-,-,-,8P,-,-,-,PH-08Y,SAN	
PD9	AG000012	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
PD8	AG000012	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
PD5	AG000012	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
PD4	AG000012	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D35	AG000012	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
PD2	AG000012	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
PD3	AG000012	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
D17	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D20	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D21	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D23	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D16	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D15	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D14	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D13	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D12	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D58	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D59	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D60	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D61	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D62	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D63	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D64	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D57	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D50C	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D50FL	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D50FR	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D50RL	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D50RR	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D50W	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D56	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D65	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D80	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D81	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D89	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D90	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D91	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	

LOCATION	TOSHIBA PART NO.	SAMSUNG CODE NO.	Description;Specification	REMARK
D92	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D93	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D73	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D66	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D67	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D68	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D69	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D70	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D71	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D72	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D35FL	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D35FR	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D35RL	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D35RR	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D35W	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D36C	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D36FL	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D35C	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D24	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D25	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D30	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D31	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D32	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D33	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D34	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D36FR	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D37W	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D38C	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D38FL	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D38FR	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D38RL	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D38RR	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D38W	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D37RR	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D36RL	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D36RR	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D36W	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D37C	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D37FL	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D37FR	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
D37RL	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
PD1	AG000014	0402-000127	DIODE-RECTIFIER;1N4002,100V,1A,DO-41,TP	
D77	AG000014	0402-000127	DIODE-RECTIFIER;1N4002,100V,1A,DO-41,TP	
D76	AG000014	0402-000127	DIODE-RECTIFIER;1N4002,100V,1A,DO-41,TP	
D41RR	AG000016	0402-000309	DIODE-RECTIFIER;1SR154-400,400V,1A,SOD-1	
D41RL	AG000016	0402-000309	DIODE-RECTIFIER;1SR154-400,400V,1A,SOD-1	
D41FR	AG000016	0402-000309	DIODE-RECTIFIER;1SR154-400,400V,1A,SOD-1	
D41FL	AG000016	0402-000309	DIODE-RECTIFIER;1SR154-400,400V,1A,SOD-1	
D41C	AG000016	0402-000309	DIODE-RECTIFIER;1SR154-400,400V,1A,SOD-1	
D42RR	AG000016	0402-000309	DIODE-RECTIFIER;1SR154-400,400V,1A,SOD-1	
D42RL	AG000016	0402-000309	DIODE-RECTIFIER;1SR154-400,400V,1A,SOD-1	
D42FR	AG000016	0402-000309	DIODE-RECTIFIER;1SR154-400,400V,1A,SOD-1	
D42FL	AG000016	0402-000309	DIODE-RECTIFIER;1SR154-400,400V,1A,SOD-1	
D42C	AG000016	0402-000309	DIODE-RECTIFIER;1SR154-400,400V,1A,SOD-1	
D39RR	AG000016	0402-000309	DIODE-RECTIFIER;1SR154-400,400V,1A,SOD-1	
D39RL	AG000016	0402-000309	DIODE-RECTIFIER;1SR154-400,400V,1A,SOD-1	
D39FR	AG000016	0402-000309	DIODE-RECTIFIER;1SR154-400,400V,1A,SOD-1	
D39FL	AG000016	0402-000309	DIODE-RECTIFIER;1SR154-400,400V,1A,SOD-1	
D39C	AG000016	0402-000309	DIODE-RECTIFIER;1SR154-400,400V,1A,SOD-1	
D40RR	AG000016	0402-000309	DIODE-RECTIFIER;1SR154-400,400V,1A,SOD-1	
D40RL	AG000016	0402-000309	DIODE-RECTIFIER;1SR154-400,400V,1A,SOD-1	
D40FR	AG000016	0402-000309	DIODE-RECTIFIER;1SR154-400,400V,1A,SOD-1	
D40FL	AG000016	0402-000309	DIODE-RECTIFIER;1SR154-400,400V,1A,SOD-1	
D40C	AG000016	0402-000309	DIODE-RECTIFIER;1SR154-400,400V,1A,SOD-1	
D42W	AG000019	0402-001484	DIODE-RECTIFIER;S2B,100V,1.5A,DO-214AA,T	
D41W	AG000019	0402-001484	DIODE-RECTIFIER;S2B,100V,1.5A,DO-214AA,T	
D40W	AG000019	0402-001484	DIODE-RECTIFIER;S2B,100V,1.5A,DO-214AA,T	
D39W	AG000019	0402-001484	DIODE-RECTIFIER;S2B,100V,1.5A,DO-214AA,T	
ZD21	AG000020	0403-000004	DIODE-ZENER;UZ12BM,12V,11.6-12.4V,500mW,	
UZD1	AG000023	0403-000367	DIODE-ZENER;UZ7.5BSC,7.5V,7.33-7.64V,500	
ZD7	AG000025	0403-000382	DIODE-ZENER;UZP15B,15V,13.9-15.6V,1W,DO-	
ZD8	AG000025	0403-000382	DIODE-ZENER;UZP15B,15V,13.9-15.6V,1W,DO-	
PZD2	AG000026	0403-000564	DIODE-ZENER;TZP16A,16V,15.3-17.1V,1W,DO-	
PZD1	AG000026	0403-000564	DIODE-ZENER;TZP16A,16V,15.3-17.1V,1W,DO-	
ZD16	AG000027	0403-001062	DIODE-ZENER;UDZ4.7B,4.55-4.75V,200mW,SOD	
ZD15	AG000027	0403-001062	DIODE-ZENER;UDZ4.7B,4.55-4.75V,200mW,SOD	
ZD6C	AG000028	0403-001079	DIODE-ZENER;UDZ3.9B,7%,200MW,SOD-323,TP	
ZD6FL	AG000028	0403-001079	DIODE-ZENER;UDZ3.9B,7%,200MW,SOD-323,TP	
ZD6FR	AG000028	0403-001079	DIODE-ZENER;UDZ3.9B,7%,200MW,SOD-323,TP	
ZD6RL	AG000028	0403-001079	DIODE-ZENER;UDZ3.9B,7%,200MW,SOD-323,TP	
ZD6RR	AG000028	0403-001079	DIODE-ZENER;UDZ3.9B,7%,200MW,SOD-323,TP	
ZD6W	AG000028	0403-001079	DIODE-ZENER;UDZ3.9B,7%,200MW,SOD-323,TP	
ZD5C	AG000028	0403-001079	DIODE-ZENER;UDZ3.9B,7%,200MW,SOD-323,TP	
ZD5FL	AG000028	0403-001079	DIODE-ZENER;UDZ3.9B,7%,200MW,SOD-323,TP	
ZD5FR	AG000028	0403-001079	DIODE-ZENER;UDZ3.9B,7%,200MW,SOD-323,TP	
ZD5W	AG000028	0403-001079	DIODE-ZENER;UDZ3.9B,7%,200MW,SOD-323,TP	
ZD5RR	AG000028	0403-001079	DIODE-ZENER;UDZ3.9B,7%,200MW,SOD-323,TP	
ZD5RL	AG000028	0403-001079	DIODE-ZENER;UDZ3.9B,7%,200MW,SOD-323,TP	
ZD17	AG000029	0403-001376	DIODE-ZENER;UDZ3.6B,3.6-3.845V,200mW,SOD	
ZD18	AG000029	0403-001376	DIODE-ZENER;UDZ3.6B,3.6-3.845V,200mW,SOD	
ZD19	AG000029	0403-001376	DIODE-ZENER;UDZ3.6B,3.6-3.845V,200mW,SOD	
ZD20	AG000029	0403-001376	DIODE-ZENER;UDZ3.6B,3.6-3.845V,200mW,SOD	
ZD9	AG000029	0403-001376	DIODE-ZENER;UDZ3.6B,3.6-3.845V,200mW,SOD	

LOCATION	TOSHIBA PART NO.	SAMSUNG CODE NO.	Description;Specification	REMARK
ZD10	AG000029	0403-001376	DIODE-ZENER;UDZ3.6B,3.6-3.845V,200mW,SOD	
ZD11	AG000029	0403-001376	DIODE-ZENER;UDZ3.6B,3.6-3.845V,200mW,SOD	
ZD12	AG000029	0403-001376	DIODE-ZENER;UDZ3.6B,3.6-3.845V,200mW,SOD	
ZD13	AG000029	0403-001376	DIODE-ZENER;UDZ3.6B,3.6-3.845V,200mW,SOD	
ZD14	AG000029	0403-001376	DIODE-ZENER;UDZ3.6B,3.6-3.845V,200mW,SOD	
Q97	AG000034	0501-000303	TR-SMALL SIGNAL;KSA733,PNP,250mW,TO-92,T	
Q16	AG000034	0501-000303	TR-SMALL SIGNAL;KSA733,PNP,250mW,TO-92,T	
Q13	AG000034	0501-000303	TR-SMALL SIGNAL;KSA733,PNP,250mW,TO-92,T	
Q35W	AG000036	0501-000331	TR-SMALL SIGNAL;KSC1009-Y,NPN,800mW,TO-9	
Q35RR	AG000036	0501-000331	TR-SMALL SIGNAL;KSC1009-Y,NPN,800mW,TO-9	
Q35RL	AG000036	0501-000331	TR-SMALL SIGNAL;KSC1009-Y,NPN,800mW,TO-9	
Q35FR	AG000036	0501-000331	TR-SMALL SIGNAL;KSC1009-Y,NPN,800mW,TO-9	
Q35FL	AG000036	0501-000331	TR-SMALL SIGNAL;KSC1009-Y,NPN,800mW,TO-9	
Q35C	AG000036	0501-000331	TR-SMALL SIGNAL;KSC1009-Y,NPN,800mW,TO-9	
Q8	AG000037	0501-000341	TR-SMALL SIGNAL;KSC1623-L,NPN,200mW,SOT-	
Q15	AG000037	0501-000341	TR-SMALL SIGNAL;KSC1623-L,NPN,200mW,SOT-	
Q14	AG000037	0501-000341	TR-SMALL SIGNAL;KSC1623-L,NPN,200mW,SOT-	
Q19W	AG000038	0501-000354	TR-SMALL SIGNAL;KSC1845-F,NPN,500mW,TO-9	
Q19RR	AG000038	0501-000354	TR-SMALL SIGNAL;KSC1845-F,NPN,500mW,TO-9	
Q19RL	AG000038	0501-000354	TR-SMALL SIGNAL;KSC1845-F,NPN,500mW,TO-9	
Q19C	AG000038	0501-000354	TR-SMALL SIGNAL;KSC1845-F,NPN,500mW,TO-9	
Q19FL	AG000038	0501-000354	TR-SMALL SIGNAL;KSC1845-F,NPN,500mW,TO-9	
Q19FR	AG000038	0501-000354	TR-SMALL SIGNAL;KSC1845-F,NPN,500mW,TO-9	
Q22W	AG000039	0501-000359	TR-SMALL SIGNAL;KSC2310-Y,NPN,800mW,TO-9	
Q22RR	AG000039	0501-000359	TR-SMALL SIGNAL;KSC2310-Y,NPN,800mW,TO-9	
Q22RL	AG000039	0501-000359	TR-SMALL SIGNAL;KSC2310-Y,NPN,800mW,TO-9	
Q22C	AG000039	0501-000359	TR-SMALL SIGNAL;KSC2310-Y,NPN,800mW,TO-9	
Q22FL	AG000039	0501-000359	TR-SMALL SIGNAL;KSC2310-Y,NPN,800mW,TO-9	
Q22FR	AG000039	0501-000359	TR-SMALL SIGNAL;KSC2310-Y,NPN,800mW,TO-9	
PQ10	AG000040	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
Q96	AG000040	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
Q6	AG000041	0501-000610	TR-SMALL SIGNAL;KSA928A-Y,PNP,1W,TO-92L,	
Q18C	AG000043	0501-002184	TR-SMALL SIGNAL;KTD1304,NPN,200mW,SOT-23	
Q18FL	AG000043	0501-002184	TR-SMALL SIGNAL;KTD1304,NPN,200mW,SOT-23	
Q18FR	AG000043	0501-002184	TR-SMALL SIGNAL;KTD1304,NPN,200mW,SOT-23	
Q18RL	AG000043	0501-002184	TR-SMALL SIGNAL;KTD1304,NPN,200mW,SOT-23	
Q18RR	AG000043	0501-002184	TR-SMALL SIGNAL;KTD1304,NPN,200mW,SOT-23	
Q18W	AG000043	0501-002184	TR-SMALL SIGNAL;KTD1304,NPN,200mW,SOT-23	
Q17C	AG000043	0501-002184	TR-SMALL SIGNAL;KTD1304,NPN,200mW,SOT-23	
Q17FL	AG000043	0501-002184	TR-SMALL SIGNAL;KTD1304,NPN,200mW,SOT-23	
Q17FR	AG000043	0501-002184	TR-SMALL SIGNAL;KTD1304,NPN,200mW,SOT-23	
Q17W	AG000043	0501-002184	TR-SMALL SIGNAL;KTD1304,NPN,200mW,SOT-23	
Q17RR	AG000043	0501-002184	TR-SMALL SIGNAL;KTD1304,NPN,200mW,SOT-23	
Q17RL	AG000043	0501-002184	TR-SMALL SIGNAL;KTD1304,NPN,200mW,SOT-23	
Q20W	AG000044	0501-002188	TR-SMALL SIGNAL;KSA992,PNP,500MW,TO-92,T	
Q20RR	AG000044	0501-002188	TR-SMALL SIGNAL;KSA992,PNP,500MW,TO-92,T	
Q20RL	AG000044	0501-002188	TR-SMALL SIGNAL;KSA992,PNP,500MW,TO-92,T	
Q20C	AG000044	0501-002188	TR-SMALL SIGNAL;KSA992,PNP,500MW,TO-92,T	
Q20FL	AG000044	0501-002188	TR-SMALL SIGNAL;KSA992,PNP,500MW,TO-92,T	
Q20FR	AG000044	0501-002188	TR-SMALL SIGNAL;KSA992,PNP,500MW,TO-92,T	
Q21W	AG000045	0501-002332	TR-SMALL SIGNAL;KSA910,PNP,800mW,TO-92L,	
Q21RR	AG000045	0501-002332	TR-SMALL SIGNAL;KSA910,PNP,800mW,TO-92L,	
Q21RL	AG000045	0501-002332	TR-SMALL SIGNAL;KSA910,PNP,800mW,TO-92L,	
Q21C	AG000045	0501-002332	TR-SMALL SIGNAL;KSA910,PNP,800mW,TO-92L,	
Q21FL	AG000045	0501-002332	TR-SMALL SIGNAL;KSA910,PNP,800mW,TO-92L,	
Q21FR	AG000045	0501-002332	TR-SMALL SIGNAL;KSA910,PNP,800mW,TO-92L,	
Q41W	AG000046	0504-000118	TR-DIGITAL;KSR1003,NPN,300MW,22K/22K,TO-	
Q41RR	AG000046	0504-000118	TR-DIGITAL;KSR1003,NPN,300MW,22K/22K,TO-	
Q41RL	AG000046	0504-000118	TR-DIGITAL;KSR1003,NPN,300MW,22K/22K,TO-	
Q41FR	AG000046	0504-000118	TR-DIGITAL;KSR1003,NPN,300MW,22K/22K,TO-	
Q41FL	AG000046	0504-000118	TR-DIGITAL;KSR1003,NPN,300MW,22K/22K,TO-	
Q41C	AG000046	0504-000118	TR-DIGITAL;KSR1003,NPN,300MW,22K/22K,TO-	
Q39	AG000048	0504-000156	TR-DIGITAL;KSR2103,PNP,200MW,22K/22K,SOT	
Q38	AG000048	0504-000156	TR-DIGITAL;KSR2103,PNP,200MW,22K/22K,SOT	
Q37	AG000048	0504-000156	TR-DIGITAL;KSR2103,PNP,200MW,22K/22K,SOT	
Q40W	AG000049	0504-001003	TR-DIGITAL;KSR2003,PNP,300MW,22K/22K,TO-	
Q40RR	AG000049	0504-001003	TR-DIGITAL;KSR2003,PNP,300MW,22K/22K,TO-	
Q40RL	AG000049	0504-001003	TR-DIGITAL;KSR2003,PNP,300MW,22K/22K,TO-	
Q40FR	AG000049	0504-001003	TR-DIGITAL;KSR2003,PNP,300MW,22K/22K,TO-	
Q12	AG000049	0504-001003	TR-DIGITAL;KSR2003,PNP,300MW,22K/22K,TO-	
Q40C	AG000049	0504-001003	TR-DIGITAL;KSR2003,PNP,300MW,22K/22K,TO-	
Q40FL	AG000049	0504-001003	TR-DIGITAL;KSR2003,PNP,300MW,22K/22K,TO-	
IC7	AG000067	1201-000163	IC-OP AMP;4560,SOP,8P,173MIL,DUAL,100V/m	
IC6	AG000067	1201-000163	IC-OP AMP;4560,SOP,8P,173MIL,DUAL,100V/m	
IC5	AG000067	1201-000163	IC-OP AMP;4560,SOP,8P,173MIL,DUAL,100V/m	
CIC1	AG000067	1201-000163	IC-OP AMP;4560,SOP,8P,173MIL,DUAL,100V/m	
R90FR	AG000086	2001-000003	R-CARBON;330ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R90FL	AG000086	2001-000003	R-CARBON;330ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R90C	AG000086	2001-000003	R-CARBON;330ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R90RL	AG000086	2001-000003	R-CARBON;330ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R90RR	AG000086	2001-000003	R-CARBON;330ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R90W	AG000086	2001-000003	R-CARBON;330ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R85C	AG000086	2001-000003	R-CARBON;330ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R85FL	AG000086	2001-000003	R-CARBON;330ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R85FR	AG000086	2001-000003	R-CARBON;330ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R85RL	AG000086	2001-000003	R-CARBON;330ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R85RR	AG000086	2001-000003	R-CARBON;330ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R85W	AG000086	2001-000003	R-CARBON;330ohm,5%,1/8W,AA,TP,1.8x3.2mm	
UR32	AG000088	2001-000023	R-CARBON;47OHM,5%,1/4W,AA,TP,2.4X6.4MM	
UR31	AG000088	2001-000023	R-CARBON;47OHM,5%,1/4W,AA,TP,2.4X6.4MM	
R144	AG000094	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R36FR	AG000104	2001-000700	R-CARBON;39KOHM,5%,1/4W,AA,TP,2.4X6.4MM	
R36FL	AG000104	2001-000700	R-CARBON;39KOHM,5%,1/4W,AA,TP,2.4X6.4MM	

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R36C	AG000104	2001-000700	R-CARBON;39KOHM,5%,1/4W,AA,TP,2.4X6.4MM	
R36RL	AG000104	2001-000700	R-CARBON;39KOHM,5%,1/4W,AA,TP,2.4X6.4MM	
R36RR	AG000104	2001-000700	R-CARBON;39KOHM,5%,1/4W,AA,TP,2.4X6.4MM	
R36W	AG000104	2001-000700	R-CARBON;39KOHM,5%,1/4W,AA,TP,2.4X6.4MM	
R33C	AG000104	2001-000700	R-CARBON;39KOHM,5%,1/4W,AA,TP,2.4X6.4MM	
R33FL	AG000104	2001-000700	R-CARBON;39KOHM,5%,1/4W,AA,TP,2.4X6.4MM	
R33FR	AG000104	2001-000700	R-CARBON;39KOHM,5%,1/4W,AA,TP,2.4X6.4MM	
R33W	AG000104	2001-000700	R-CARBON;39KOHM,5%,1/4W,AA,TP,2.4X6.4MM	
R33RR	AG000104	2001-000700	R-CARBON;39KOHM,5%,1/4W,AA,TP,2.4X6.4MM	
R33RL	AG000104	2001-000700	R-CARBON;39KOHM,5%,1/4W,AA,TP,2.4X6.4MM	
R89C	AG000107	2001-000924	R-CARBON;680ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R89FL	AG000107	2001-000924	R-CARBON;680ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R89FR	AG000107	2001-000924	R-CARBON;680ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R89RL	AG000107	2001-000924	R-CARBON;680ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R89RR	AG000107	2001-000924	R-CARBON;680ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R89W	AG000107	2001-000924	R-CARBON;680ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R86W	AG000107	2001-000924	R-CARBON;680ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R86C	AG000107	2001-000924	R-CARBON;680ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R86C	AG000107	2001-000924	R-CARBON;680ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R86FL	AG000107	2001-000924	R-CARBON;680ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R86FR	AG000107	2001-000924	R-CARBON;680ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R86RL	AG000107	2001-000924	R-CARBON;680ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R86RR	AG000107	2001-000924	R-CARBON;680ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R44	AG000115	2003-000674	R-METAL OXIDE(S);39ohm,5%,1W,AA,TP,3.3x9	
JWO	AG000118	2007-000029	R-CHIP;0ohm,5%,1/8W,TP,2012	
R35C	AG000145	2007-000241	R-CHIP;1.5Kohm,5%,1/8W,TP,2012	
R35FL	AG000145	2007-000241	R-CHIP;1.5Kohm,5%,1/8W,TP,2012	
R35FL	AG000145	2007-000241	R-CHIP;1.5Kohm,5%,1/8W,TP,2012	
R35FR	AG000145	2007-000241	R-CHIP;1.5Kohm,5%,1/8W,TP,2012	
R35RL	AG000145	2007-000241	R-CHIP;1.5Kohm,5%,1/8W,TP,2012	
R35RR	AG000145	2007-000241	R-CHIP;1.5Kohm,5%,1/8W,TP,2012	
R32C	AG000145	2007-000241	R-CHIP;1.5Kohm,5%,1/8W,TP,2012	
R32FL	AG000145	2007-000241	R-CHIP;1.5Kohm,5%,1/8W,TP,2012	
R32FR	AG000145	2007-000241	R-CHIP;1.5Kohm,5%,1/8W,TP,2012	
R32RR	AG000145	2007-000241	R-CHIP;1.5Kohm,5%,1/8W,TP,2012	
R32RL	AG000145	2007-000241	R-CHIP;1.5Kohm,5%,1/8W,TP,2012	
R32FR	AG000145	2007-000241	R-CHIP;1.5Kohm,5%,1/8W,TP,2012	
R88C	AG000146	2007-000267	R-CHIP;1.8Kohm,5%,1/8W,TP,2012	
R88FL	AG000146	2007-000267	R-CHIP;1.8Kohm,5%,1/8W,TP,2012	
R88FR	AG000146	2007-000267	R-CHIP;1.8Kohm,5%,1/8W,TP,2012	
R88RL	AG000146	2007-000267	R-CHIP;1.8Kohm,5%,1/8W,TP,2012	
R88RR	AG000146	2007-000267	R-CHIP;1.8Kohm,5%,1/8W,TP,2012	
R88W	AG000146	2007-000267	R-CHIP;1.8Kohm,5%,1/8W,TP,2012	
R79C	AG000146	2007-000267	R-CHIP;1.8Kohm,5%,1/8W,TP,2012	
R79FL	AG000146	2007-000267	R-CHIP;1.8Kohm,5%,1/8W,TP,2012	
R79FR	AG000146	2007-000267	R-CHIP;1.8Kohm,5%,1/8W,TP,2012	
R79RL	AG000146	2007-000267	R-CHIP;1.8Kohm,5%,1/8W,TP,2012	
R79RR	AG000146	2007-000267	R-CHIP;1.8Kohm,5%,1/8W,TP,2012	
R79W	AG000146	2007-000267	R-CHIP;1.8Kohm,5%,1/8W,TP,2012	
R81C	AG000149	2007-000300	R-CHIP;10Kohm,5%,1/8W,TP,2012	
R74	AG000149	2007-000300	R-CHIP;10Kohm,5%,1/8W,TP,2012	
R71	AG000149	2007-000300	R-CHIP;10Kohm,5%,1/8W,TP,2012	
R65	AG000149	2007-000300	R-CHIP;10Kohm,5%,1/8W,TP,2012	
R63	AG000149	2007-000300	R-CHIP;10Kohm,5%,1/8W,TP,2012	
R50	AG000149	2007-000300	R-CHIP;10Kohm,5%,1/8W,TP,2012	
R99	AG000149	2007-000300	R-CHIP;10Kohm,5%,1/8W,TP,2012	
R98	AG000149	2007-000300	R-CHIP;10Kohm,5%,1/8W,TP,2012	
R81RR	AG000149	2007-000300	R-CHIP;10Kohm,5%,1/8W,TP,2012	
R81RL	AG000149	2007-000300	R-CHIP;10Kohm,5%,1/8W,TP,2012	
R81FR	AG000149	2007-000300	R-CHIP;10Kohm,5%,1/8W,TP,2012	
R81FL	AG000149	2007-000300	R-CHIP;10Kohm,5%,1/8W,TP,2012	
R41	AG000149	2007-000300	R-CHIP;10Kohm,5%,1/8W,TP,2012	
R123	AG000149	2007-000300	R-CHIP;10Kohm,5%,1/8W,TP,2012	
R118	AG000149	2007-000300	R-CHIP;10Kohm,5%,1/8W,TP,2012	
R112	AG000149	2007-000300	R-CHIP;10Kohm,5%,1/8W,TP,2012	
R107	AG000149	2007-000300	R-CHIP;10Kohm,5%,1/8W,TP,2012	
R101	AG000149	2007-000300	R-CHIP;10Kohm,5%,1/8W,TP,2012	
PR7	AG000149	2007-000300	R-CHIP;10Kohm,5%,1/8W,TP,2012	
R203R	AG000149	2007-000300	R-CHIP;10Kohm,5%,1/8W,TP,2012	
R203L	AG000149	2007-000300	R-CHIP;10Kohm,5%,1/8W,TP,2012	
R200R	AG000149	2007-000300	R-CHIP;10Kohm,5%,1/8W,TP,2012	
R142	AG000149	2007-000300	R-CHIP;10Kohm,5%,1/8W,TP,2012	
R143	AG000149	2007-000300	R-CHIP;10Kohm,5%,1/8W,TP,2012	
R200L	AG000149	2007-000300	R-CHIP;10Kohm,5%,1/8W,TP,2012	
R64	AG000152	2007-000355	R-CHIP;12Kohm,5%,1/8W,TP,2012	
R81W	AG000154	2007-000409	R-CHIP;15Kohm,5%,1/8W,TP,2012	
R129	AG000154	2007-000409	R-CHIP;15Kohm,5%,1/8W,TP,2012	
R76C	AG000155	2007-000468	R-CHIP;1Kohm,5%,1/8W,TP,2012	
R122	AG000155	2007-000468	R-CHIP;1Kohm,5%,1/8W,TP,2012	
R117	AG000155	2007-000468	R-CHIP;1Kohm,5%,1/8W,TP,2012	
R111	AG000155	2007-000468	R-CHIP;1Kohm,5%,1/8W,TP,2012	
R106	AG000155	2007-000468	R-CHIP;1Kohm,5%,1/8W,TP,2012	
R100	AG000155	2007-000468	R-CHIP;1Kohm,5%,1/8W,TP,2012	
R77RR	AG000155	2007-000468	R-CHIP;1Kohm,5%,1/8W,TP,2012	
R77RL	AG000155	2007-000468	R-CHIP;1Kohm,5%,1/8W,TP,2012	
R77FR	AG000155	2007-000468	R-CHIP;1Kohm,5%,1/8W,TP,2012	
R77FL	AG000155	2007-000468	R-CHIP;1Kohm,5%,1/8W,TP,2012	
R77C	AG000155	2007-000468	R-CHIP;1Kohm,5%,1/8W,TP,2012	
R76FL	AG000155	2007-000468	R-CHIP;1Kohm,5%,1/8W,TP,2012	
R76FR	AG000155	2007-000468	R-CHIP;1Kohm,5%,1/8W,TP,2012	
R76RL	AG000155	2007-000468	R-CHIP;1Kohm,5%,1/8W,TP,2012	
R76RR	AG000155	2007-000468	R-CHIP;1Kohm,5%,1/8W,TP,2012	
R97	AG000158	2007-000493	R-CHIP;2.2Kohm,5%,1/8W,TP,2012	

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R77W	AG000158	2007-000493	R-CHIP;2.2Kohm,5%,1/8W,TP,2012	
R76W	AG000158	2007-000493	R-CHIP;2.2Kohm,5%,1/8W,TP,2012	
R128	AG000158	2007-000493	R-CHIP;2.2Kohm,5%,1/8W,TP,2012	
R125	AG000161	2007-000572	R-CHIP;220ohm,5%,1/8W,TP,2012	
R121	AG000161	2007-000572	R-CHIP;220ohm,5%,1/8W,TP,2012	
R120	AG000161	2007-000572	R-CHIP;220ohm,5%,1/8W,TP,2012	
R126	AG000161	2007-000572	R-CHIP;220ohm,5%,1/8W,TP,2012	
R131	AG000161	2007-000572	R-CHIP;220ohm,5%,1/8W,TP,2012	
R132	AG000161	2007-000572	R-CHIP;220ohm,5%,1/8W,TP,2012	
R115	AG000161	2007-000572	R-CHIP;220ohm,5%,1/8W,TP,2012	
PR11	AG000161	2007-000572	R-CHIP;220ohm,5%,1/8W,TP,2012	
R103	AG000161	2007-000572	R-CHIP;220ohm,5%,1/8W,TP,2012	
R104	AG000161	2007-000572	R-CHIP;220ohm,5%,1/8W,TP,2012	
R114	AG000161	2007-000572	R-CHIP;220ohm,5%,1/8W,TP,2012	
R110	AG000161	2007-000572	R-CHIP;220ohm,5%,1/8W,TP,2012	
R109	AG000161	2007-000572	R-CHIP;220ohm,5%,1/8W,TP,2012	
R67	AG000162	2007-000586	R-CHIP;22Kohm,5%,1/8W,TP,2012	
R62	AG000162	2007-000586	R-CHIP;22Kohm,5%,1/8W,TP,2012	
R42	AG000162	2007-000586	R-CHIP;22Kohm,5%,1/8W,TP,2012	
R22	AG000162	2007-000586	R-CHIP;22Kohm,5%,1/8W,TP,2012	
R21	AG000162	2007-000586	R-CHIP;22Kohm,5%,1/8W,TP,2012	
PR9	AG000162	2007-000586	R-CHIP;22Kohm,5%,1/8W,TP,2012	
PR6	AG000162	2007-000586	R-CHIP;22Kohm,5%,1/8W,TP,2012	
R127	AG000163	2007-000642	R-CHIP;270ohm,5%,1/8W,TP,2012	
R116	AG000163	2007-000642	R-CHIP;270ohm,5%,1/8W,TP,2012	
R105	AG000163	2007-000642	R-CHIP;270ohm,5%,1/8W,TP,2012	
R84RR	AG000165	2007-000653	R-CHIP;27Kohm,5%,1/8W,TP,2012	
R84RL	AG000165	2007-000653	R-CHIP;27Kohm,5%,1/8W,TP,2012	
R84FR	AG000165	2007-000653	R-CHIP;27Kohm,5%,1/8W,TP,2012	
R84FL	AG000165	2007-000653	R-CHIP;27Kohm,5%,1/8W,TP,2012	
R84C	AG000165	2007-000653	R-CHIP;27Kohm,5%,1/8W,TP,2012	
R83FR	AG000167	2007-000686	R-CHIP;3.3Kohm,5%,1/8W,TP,2012	
R83FL	AG000167	2007-000686	R-CHIP;3.3Kohm,5%,1/8W,TP,2012	
R83C	AG000167	2007-000686	R-CHIP;3.3Kohm,5%,1/8W,TP,2012	
R83RL	AG000167	2007-000686	R-CHIP;3.3Kohm,5%,1/8W,TP,2012	
R83RR	AG000167	2007-000686	R-CHIP;3.3Kohm,5%,1/8W,TP,2012	
R83W	AG000167	2007-000686	R-CHIP;3.3Kohm,5%,1/8W,TP,2012	
R82C	AG000167	2007-000686	R-CHIP;3.3Kohm,5%,1/8W,TP,2012	
R82FL	AG000167	2007-000686	R-CHIP;3.3Kohm,5%,1/8W,TP,2012	
R82FR	AG000167	2007-000686	R-CHIP;3.3Kohm,5%,1/8W,TP,2012	
R82W	AG000167	2007-000686	R-CHIP;3.3Kohm,5%,1/8W,TP,2012	
R82RR	AG000167	2007-000686	R-CHIP;3.3Kohm,5%,1/8W,TP,2012	
R82RL	AG000167	2007-000686	R-CHIP;3.3Kohm,5%,1/8W,TP,2012	
R43	AG000169	2007-000774	R-CHIP;33Kohm,5%,1/8W,TP,2012	
R69	AG000169	2007-000774	R-CHIP;33Kohm,5%,1/8W,TP,2012	
R70	AG000169	2007-000774	R-CHIP;33Kohm,5%,1/8W,TP,2012	
R75W	AG000169	2007-000774	R-CHIP;33Kohm,5%,1/8W,TP,2012	
R84W	AG000169	2007-000774	R-CHIP;33Kohm,5%,1/8W,TP,2012	
R204R	AG000169	2007-000774	R-CHIP;33Kohm,5%,1/8W,TP,2012	
R19	AG000169	2007-000774	R-CHIP;33Kohm,5%,1/8W,TP,2012	
R20	AG000169	2007-000774	R-CHIP;33Kohm,5%,1/8W,TP,2012	
R201L	AG000169	2007-000774	R-CHIP;33Kohm,5%,1/8W,TP,2012	
R201R	AG000169	2007-000774	R-CHIP;33Kohm,5%,1/8W,TP,2012	
R204L	AG000169	2007-000774	R-CHIP;33Kohm,5%,1/8W,TP,2012	
R68	AG000171	2007-000872	R-CHIP;4.7Kohm,5%,1/8W,TP,2012	
R66	AG000171	2007-000872	R-CHIP;4.7Kohm,5%,1/8W,TP,2012	
R47	AG000171	2007-000872	R-CHIP;4.7Kohm,5%,1/8W,TP,2012	
R39RL	AG000172	2007-000941	R-CHIP;47Kohm,5%,1/8W,TP,2012	
R39RR	AG000172	2007-000941	R-CHIP;47Kohm,5%,1/8W,TP,2012	
R61	AG000172	2007-000941	R-CHIP;47Kohm,5%,1/8W,TP,2012	
R96	AG000172	2007-000941	R-CHIP;47Kohm,5%,1/8W,TP,2012	
R108	AG000172	2007-000941	R-CHIP;47Kohm,5%,1/8W,TP,2012	
R113	AG000172	2007-000941	R-CHIP;47Kohm,5%,1/8W,TP,2012	
R119	AG000172	2007-000941	R-CHIP;47Kohm,5%,1/8W,TP,2012	
R135	AG000172	2007-000941	R-CHIP;47Kohm,5%,1/8W,TP,2012	
R87RL	AG000175	2007-000981	R-CHIP;5.6Kohm,5%,1/8W,TP,2012	
R87RR	AG000175	2007-000981	R-CHIP;5.6Kohm,5%,1/8W,TP,2012	
R87W	AG000175	2007-000981	R-CHIP;5.6Kohm,5%,1/8W,TP,2012	
R87C	AG000175	2007-000981	R-CHIP;5.6Kohm,5%,1/8W,TP,2012	
R87FL	AG000175	2007-000981	R-CHIP;5.6Kohm,5%,1/8W,TP,2012	
R87FR	AG000175	2007-000981	R-CHIP;5.6Kohm,5%,1/8W,TP,2012	
R80C	AG000177	2007-001039	R-CHIP;56Kohm,5%,1/8W,TP,2012	
R78W	AG000177	2007-001039	R-CHIP;56Kohm,5%,1/8W,TP,2012	
R78RR	AG000177	2007-001039	R-CHIP;56Kohm,5%,1/8W,TP,2012	
R78RL	AG000177	2007-001039	R-CHIP;56Kohm,5%,1/8W,TP,2012	
R80FL	AG000177	2007-001039	R-CHIP;56Kohm,5%,1/8W,TP,2012	
R80FR	AG000177	2007-001039	R-CHIP;56Kohm,5%,1/8W,TP,2012	
R80RL	AG000177	2007-001039	R-CHIP;56Kohm,5%,1/8W,TP,2012	
R80RR	AG000177	2007-001039	R-CHIP;56Kohm,5%,1/8W,TP,2012	
R80W	AG000177	2007-001039	R-CHIP;56Kohm,5%,1/8W,TP,2012	
R78FR	AG000177	2007-001039	R-CHIP;56Kohm,5%,1/8W,TP,2012	
R17	AG000177	2007-001039	R-CHIP;56Kohm,5%,1/8W,TP,2012	
R18	AG000177	2007-001039	R-CHIP;56Kohm,5%,1/8W,TP,2012	
R38C	AG000177	2007-001039	R-CHIP;56Kohm,5%,1/8W,TP,2012	
R38FL	AG000177	2007-001039	R-CHIP;56Kohm,5%,1/8W,TP,2012	
R38FR	AG000177	2007-001039	R-CHIP;56Kohm,5%,1/8W,TP,2012	
R78FL	AG000177	2007-001039	R-CHIP;56Kohm,5%,1/8W,TP,2012	
R78C	AG000177	2007-001039	R-CHIP;56Kohm,5%,1/8W,TP,2012	
R38W	AG000177	2007-001039	R-CHIP;56Kohm,5%,1/8W,TP,2012	
R38RL	AG000177	2007-001039	R-CHIP;56Kohm,5%,1/8W,TP,2012	
R72	AG000181	2007-001177	R-CHIP;8.2Kohm,5%,1/8W,TP,2012	
PR8	AG000181	2007-001177	R-CHIP;8.2Kohm,5%,1/8W,TP,2012	
R37FL	AG000184	2007-001216	R-CHIP;82ohm,5%,1/8W,TP,2012	

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R37FL	AG000184	2007-001216	R-CHIP;82ohm,5%,1/8W,TP,2012	
R37FR	AG000184	2007-001216	R-CHIP;82ohm,5%,1/8W,TP,2012	
R37FR	AG000184	2007-001216	R-CHIP;82ohm,5%,1/8W,TP,2012	
R37RR	AG000184	2007-001216	R-CHIP;82ohm,5%,1/8W,TP,2012	
R37RL	AG000184	2007-001216	R-CHIP;82ohm,5%,1/8W,TP,2012	
R34FL	AG000184	2007-001216	R-CHIP;82ohm,5%,1/8W,TP,2012	
R34C	AG000184	2007-001216	R-CHIP;82ohm,5%,1/8W,TP,2012	
R34FR	AG000184	2007-001216	R-CHIP;82ohm,5%,1/8W,TP,2012	
R34W	AG000184	2007-001216	R-CHIP;82ohm,5%,1/8W,TP,2012	
R34RR	AG000184	2007-001216	R-CHIP;82ohm,5%,1/8W,TP,2012	
R34RL	AG000184	2007-001216	R-CHIP;82ohm,5%,1/8W,TP,2012	
PC20	AG000191	2201-000161	C-CERAMIC,DISC;10NF,+80-20%,500V,Y5V,TP,	
PC19	AG000191	2201-000161	C-CERAMIC,DISC;10NF,+80-20%,500V,Y5V,TP,	
C17	AG000191	2201-000161	C-CERAMIC,DISC;10NF,+80-20%,500V,Y5V,TP,	
C16	AG000191	2201-000161	C-CERAMIC,DISC;10NF,+80-20%,500V,Y5V,TP,	
C15	AG000191	2201-000161	C-CERAMIC,DISC;10NF,+80-20%,500V,Y5V,TP,	
PC2A	AG000193	2201-000565	C-CERAMIC,DISC;47nF,+80-20%,-,,-,12.5x4m	
PC22	AG000193	2201-000565	C-CERAMIC,DISC;47nF,+80-20%,-,,-,12.5x4m	
PC1A	AG000193	2201-000565	C-CERAMIC,DISC;47nF,+80-20%,-,,-,12.5x4m	
C44W	AG000201	2203-000295	C-CERAMIC,CHIP;0.01NF,5%,50V,C0G,TP,2012	
C44RR	AG000201	2203-000295	C-CERAMIC,CHIP;0.01NF,5%,50V,C0G,TP,2012	
C44RL	AG000201	2203-000295	C-CERAMIC,CHIP;0.01NF,5%,50V,C0G,TP,2012	
C44C	AG000201	2203-000295	C-CERAMIC,CHIP;0.01NF,5%,50V,C0G,TP,2012	
C44FL	AG000201	2203-000295	C-CERAMIC,CHIP;0.01NF,5%,50V,C0G,TP,2012	
C44FR	AG000201	2203-000295	C-CERAMIC,CHIP;0.01NF,5%,50V,C0G,TP,2012	
C41W	AG000207	2203-000609	C-CERAMIC,CHIP;22nF,10%,50V,X7R,TP,2012	
C205R	AG000210	2203-000787	C-CERAMIC,CHIP;0.33NF,5%,50V,C0G,TP,2012	
C205L	AG000210	2203-000787	C-CERAMIC,CHIP;0.33NF,5%,50V,C0G,TP,2012	
C202R	AG000210	2203-000787	C-CERAMIC,CHIP;0.33NF,5%,50V,C0G,TP,2012	
C202L	AG000210	2203-000787	C-CERAMIC,CHIP;0.33NF,5%,50V,C0G,TP,2012	
C33RL	AG000213	2203-000953	C-CERAMIC,CHIP;0.47NF,5%,50V,C0G,TP,2012	
C33RR	AG000213	2203-000953	C-CERAMIC,CHIP;0.47NF,5%,50V,C0G,TP,2012	
C33W	AG000213	2203-000953	C-CERAMIC,CHIP;0.47NF,5%,50V,C0G,TP,2012	
C33C	AG000213	2203-000953	C-CERAMIC,CHIP;0.47NF,5%,50V,C0G,TP,2012	
C33FL	AG000213	2203-000953	C-CERAMIC,CHIP;0.47NF,5%,50V,C0G,TP,2012	
C33FR	AG000213	2203-000953	C-CERAMIC,CHIP;0.47NF,5%,50V,C0G,TP,2012	
C41RR	AG000222	2203-001518	C-CERAMIC,CHIP;1.8nF,10%,50V,X7R,TP,2012	
C41RL	AG000222	2203-001518	C-CERAMIC,CHIP;1.8nF,10%,50V,X7R,TP,2012	
C41FR	AG000222	2203-001518	C-CERAMIC,CHIP;1.8nF,10%,50V,X7R,TP,2012	
C41FL	AG000222	2203-001518	C-CERAMIC,CHIP;1.8nF,10%,50V,X7R,TP,2012	
C41C	AG000222	2203-001518	C-CERAMIC,CHIP;1.8nF,10%,50V,X7R,TP,2012	
C49RL	AG000227	2203-001611	C-CERAMIC,CHIP;0.022nF,5%,50V,NP0,TP,201	
C49RR	AG000227	2203-001611	C-CERAMIC,CHIP;0.022nF,5%,50V,NP0,TP,201	
C49W	AG000227	2203-001611	C-CERAMIC,CHIP;0.022nF,5%,50V,NP0,TP,201	
C49FR	AG000227	2203-001611	C-CERAMIC,CHIP;0.022nF,5%,50V,NP0,TP,201	
C49FL	AG000227	2203-001611	C-CERAMIC,CHIP;0.022nF,5%,50V,NP0,TP,201	
C49C	AG000227	2203-001611	C-CERAMIC,CHIP;0.022nF,5%,50V,NP0,TP,201	
C50W	AG000228	2203-001619	C-CERAMIC,CHIP;0.027nF,5%,50V,NP0,TP,201	
C129	AG000231	2203-002494	C-CERAMIC,CHIP;470nF,10%,16V,X7R,TP,2012	
C47W	AG000235	2301-000375	C-FILM,PEF;100nF,10%,TP,50V,11x12.5x6.5,	
C47RR	AG000235	2301-000375	C-FILM,PEF;100nF,10%,TP,50V,11x12.5x6.5,	
C47RL	AG000235	2301-000375	C-FILM,PEF;100nF,10%,TP,50V,11x12.5x6.5,	
C47FR	AG000235	2301-000375	C-FILM,PEF;100nF,10%,TP,50V,11x12.5x6.5,	
C47FL	AG000235	2301-000375	C-FILM,PEF;100nF,10%,TP,50V,11x12.5x6.5,	
C47C	AG000235	2301-000375	C-FILM,PEF;100nF,10%,TP,50V,11x12.5x6.5,	
PC14	AG000238	2401-000240	C-AL;100uF,20%,10V,GP,TP,5x11,5	
PC2	AG000240	2401-000357	C-AL;100UF,0.2,50V,GP,8*12,5MM,SSL	
C28	AG000243	2401-000459	C-AL;10uF,20%,35V,GP,TP,5.5x7mm,5mm	
C29	AG000243	2401-000459	C-AL;10uF,20%,35V,GP,TP,5.5x7mm,5mm	
PC6	AG000244	2401-000475	C-AL;10uF,20%,50V,GP,TP,5x11mm,5mm	
C99	AG000249	2401-000907	C-AL;22uF,20%,16V,GP,TP,5x11mm,5mm	
C43RR	AG000250	2401-000909	C-AL;22uF,20%,16V,GP,TP,5x5,2.5	
C43RL	AG000250	2401-000909	C-AL;22uF,20%,16V,GP,TP,5x5,2.5	
C43FR	AG000250	2401-000909	C-AL;22uF,20%,16V,GP,TP,5x5,2.5	
C43FL	AG000250	2401-000909	C-AL;22uF,20%,16V,GP,TP,5x5,2.5	
C43C	AG000250	2401-000909	C-AL;22uF,20%,16V,GP,TP,5x5,2.5	
C43W	AG000256	2401-001502	C-AL;47uF,20%,16V,GP,TP,6.3x5,2.5	
C39	AG000256	2401-001502	C-AL;47uF,20%,16V,GP,TP,6.3x5,2.5	
C37	AG000256	2401-001502	C-AL;47uF,20%,16V,GP,TP,6.3x5,2.5	
PC3	AG000257	2401-001511	C-AL;47uF,20%,16V,GP,6*7,5MM,TP	
C55	AG000257	2401-001511	C-AL;47uF,20%,16V,GP,6*7,5MM,TP	
C54	AG000257	2401-001511	C-AL;47uF,20%,16V,GP,6*7,5MM,TP	
C52	AG000257	2401-001511	C-AL;47uF,20%,16V,GP,6*7,5MM,TP	
PC7	AG000259	2401-001893	C-AL;100uF,20%,16V,GP,6*7,5MM,TP	
C27	AG000259	2401-001893	C-AL;100uF,20%,16V,GP,6*7,5MM,TP	
C26	AG000259	2401-001893	C-AL;100uF,20%,16V,GP,6*7,5MM,TP	
C25	AG000259	2401-001893	C-AL;100uF,20%,16V,GP,6*7,5MM,TP	
C24	AG000260	2401-001912	C-AL;1uF,20%,50V,GP,5*11,5mm,TP	
C80	AG000262	2401-001952	C-AL;4.7uF,20%,50V,GP,TP,5x7mm,5mm	
PC4	AG000262	2401-001952	C-AL;4.7uF,20%,50V,GP,TP,5x7mm,5mm	
C30	AG000265	2401-001969	C-AL;470uF,20%,25V,GP,TP,10x12.5,5	
C31	AG000265	2401-001969	C-AL;470uF,20%,25V,GP,TP,10x12.5,5	
C40RR	AG000269	2401-003336	C-AL;4.7UF,20%,50V,GP,TP,5X5,2	
C40RL	AG000269	2401-003336	C-AL;4.7UF,20%,50V,GP,TP,5X5,2	
C40FR	AG000269	2401-003336	C-AL;4.7UF,20%,50V,GP,TP,5X5,2	
C40FL	AG000269	2401-003336	C-AL;4.7UF,20%,50V,GP,TP,5X5,2	
C40C	AG000269	2401-003336	C-AL;4.7UF,20%,50V,GP,TP,5X5,2	
C40W	AG000269	2401-003336	C-AL;4.7UF,20%,50V,GP,TP,5X5,2	
PCB	AG000378	AH41-00579A	PCB;HT-DM150N,EPOXY,2,0,1.6T,1.6T SNA	
	AG000567	**AH92-01839B**	**ASSY PCB;SD43,FRONT PCB ASSY**	
ULED2	AG000050	0601-001059	LED;ROUND,YEL,5mm,585nm	
ULED1	AG000050	0601-001059	LED;ROUND,YEL,5mm,585nm	

LOCATION	TOSHIBA PART NO.	SAMSUNG CODE NO.	Description;Specification	REMARK
ULD3	AG000051	0601-001580	LED;ROUND,R-ORG/GRN,3MM,630/565NM	
UX1	AG000281	2802-001174	RESONATOR-CERAMIC;10MHZ,0.5%,BK,8X3.5X3M	
UVR	AG000287	3406-001047	SWITCH-ROTARY;5V DC,0.5mA,-,12mm	
UCW1	AG000296	3708-001212	CONNECTOR-FPC/FFC/PIC;27P,1.25mm,STRAIGH	
UCW4	AG000311	3711-000968	CONNECTOR-HEADER;BOX,4P,1R,2mm,STRAIGHT,	
HJ1	AG000324	3722-001588	JACK-PHONE;7P,3.6PI,AG,BLK,-	
UEYE	AG000348	AC59-60060A	MODULE REMOCON;GP1U281R,SHARP,38KHZ,-,-,	
VFD	AG000350	AH07-00081A	VF DISPLAY;HNV-11SS34T,HT-DM150,100X25,1	
UW3	AG000367	AH39-00433A	CBF HARNESS;HT-DM150,1061#26,-,4P,-,-,-,	
RJW2	AG000373	AH39-50001H	WIRE HARNESS;RING,1007#24,100MM,BLK	
RJW1	AG000373	AH39-50001H	WIRE HARNESS;RING,1007#24,100MM,BLK	
HOLDER	AG000395	AH61-01131A	HOLDER-VFD;HT-DM150,ABS,-,-,-,BLK,-	
UD3	AG000012	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
UD105	AG000012	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
UD101	AG000012	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
HD1	AG000012	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
UD1	AG000012	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
UD100	AG000012	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,	
UD9	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
UD15	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
UD108	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
UD10	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
UD106	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
UD107	AG000013	0401-001090	DIODE-SWITCHING;1SS355,80V,225mA,SOD-323	
UQ3	AG000033	0501-000294	TR-SMALL SIGNAL;KSA708-Y,PNP,800mW,TO-92	
UQ4	AG000037	0501-000341	TR-SMALL SIGNAL;KSC1623-L,NPN,200mW,SOT-	
UQ2	AG000046	0504-000118	TR-DIGITAL;KSR1003,NPN,300MW,22K/22K,TO-	
UQ1	AG000049	0504-001003	TR-DIGITAL;KSR2003,PNP,300MW,22K/22K,TO-	
UR26	AG000092	2001-000258	R-CARBON;1.8Kohm,5%,1/8W,AA,TP,1.8x3.2m	
UR32	AG000093	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
UR27	AG000095	2001-000331	R-CARBON;12Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
UR29	AG000098	2001-000449	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
UR28	AG000101	2001-000591	R-CARBON;3.3Kohm,5%,1/8W,AA,TP,1.8x3.2m	
UR31	AG000103	2001-000660	R-CARBON;33Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
UR28	AG000105	2001-000802	R-CARBON;5.6Kohm,5%,1/8W,AA,TP,1.8x3.2m	
UR42	AG000504	2001-001107	R-CARBON(S);220ohm,5%,1/2W,AA,TP,2.4x6.4	
UR33	AG000111	2001-001163	R-CARBON(S);560ohm,5%,1/2W,AA,TP,2.4x6.4	
UJ23	AG000118	2007-000029	R-CHIP;0ohm,5%,1/8W,TP,2012	
UR97	AG000149	2007-000300	R-CHIP;10Kohm,5%,1/8W,TP,2012	
UR81	AG000149	2007-000300	R-CHIP;10Kohm,5%,1/8W,TP,2012	
UR80	AG000149	2007-000300	R-CHIP;10Kohm,5%,1/8W,TP,2012	
UR35	AG000149	2007-000300	R-CHIP;10Kohm,5%,1/8W,TP,2012	
UR34	AG000149	2007-000300	R-CHIP;10Kohm,5%,1/8W,TP,2012	
UR74	AG000156	2007-000477	R-CHIP;1Mohm,5%,1/8W,TP,2012	
UR91	AG000158	2007-000493	R-CHIP;2.2Kohm,5%,1/8W,TP,2012	
UR94	AG000160	2007-000565	R-CHIP;220Kohm,5%,1/8W,TP,2012	
UR51	AG000162	2007-000586	R-CHIP;22Kohm,5%,1/8W,TP,2012	
UR52	AG000162	2007-000586	R-CHIP;22Kohm,5%,1/8W,TP,2012	
UR93	AG000171	2007-000872	R-CHIP;4.7Kohm,5%,1/8W,TP,2012	
UR125	AG000172	2007-000941	R-CHIP;47Kohm,5%,1/8W,TP,2012	
UR124	AG000172	2007-000941	R-CHIP;47Kohm,5%,1/8W,TP,2012	
UR123	AG000172	2007-000941	R-CHIP;47Kohm,5%,1/8W,TP,2012	
UR122	AG000172	2007-000941	R-CHIP;47Kohm,5%,1/8W,TP,2012	
UR121	AG000172	2007-000941	R-CHIP;47Kohm,5%,1/8W,TP,2012	
UR120	AG000172	2007-000941	R-CHIP;47Kohm,5%,1/8W,TP,2012	
UR119	AG000172	2007-000941	R-CHIP;47Kohm,5%,1/8W,TP,2012	
UR118	AG000172	2007-000941	R-CHIP;47Kohm,5%,1/8W,TP,2012	
UR82	AG000172	2007-000941	R-CHIP;47Kohm,5%,1/8W,TP,2012	
UR75	AG000172	2007-000941	R-CHIP;47Kohm,5%,1/8W,TP,2012	
UR50	AG000172	2007-000941	R-CHIP;47Kohm,5%,1/8W,TP,2012	
UR130	AG000172	2007-000941	R-CHIP;47Kohm,5%,1/8W,TP,2012	
UR129	AG000172	2007-000941	R-CHIP;47Kohm,5%,1/8W,TP,2012	
UR128	AG000172	2007-000941	R-CHIP;47Kohm,5%,1/8W,TP,2012	
UR127	AG000172	2007-000941	R-CHIP;47Kohm,5%,1/8W,TP,2012	
UR126	AG000172	2007-000941	R-CHIP;47Kohm,5%,1/8W,TP,2012	
UR117	AG000172	2007-000941	R-CHIP;47Kohm,5%,1/8W,TP,2012	
UR108	AG000172	2007-000941	R-CHIP;47Kohm,5%,1/8W,TP,2012	
UR107	AG000172	2007-000941	R-CHIP;47Kohm,5%,1/8W,TP,2012	
UR106	AG000172	2007-000941	R-CHIP;47Kohm,5%,1/8W,TP,2012	
UR105	AG000172	2007-000941	R-CHIP;47Kohm,5%,1/8W,TP,2012	
UR104	AG000172	2007-000941	R-CHIP;47Kohm,5%,1/8W,TP,2012	
UR103	AG000172	2007-000941	R-CHIP;47Kohm,5%,1/8W,TP,2012	
UR102	AG000172	2007-000941	R-CHIP;47Kohm,5%,1/8W,TP,2012	
UR101	AG000172	2007-000941	R-CHIP;47Kohm,5%,1/8W,TP,2012	
UR116	AG000172	2007-000941	R-CHIP;47Kohm,5%,1/8W,TP,2012	
UR115	AG000172	2007-000941	R-CHIP;47Kohm,5%,1/8W,TP,2012	
UR114	AG000172	2007-000941	R-CHIP;47Kohm,5%,1/8W,TP,2012	
UR113	AG000172	2007-000941	R-CHIP;47Kohm,5%,1/8W,TP,2012	
UR112	AG000172	2007-000941	R-CHIP;47Kohm,5%,1/8W,TP,2012	
UR111	AG000172	2007-000941	R-CHIP;47Kohm,5%,1/8W,TP,2012	
UR110	AG000172	2007-000941	R-CHIP;47Kohm,5%,1/8W,TP,2012	
UR109	AG000172	2007-000941	R-CHIP;47Kohm,5%,1/8W,TP,2012	
UR90	AG000173	2007-000947	R-CHIP;47ohm,5%,1/8W,TP,2012	
UC14	AG000510	2203-000203	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,2012	
UC15	AG000510	2203-000203	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,2012	
UC2A	AG000510	2203-000203	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,2012	
HC3R	AG000511	2203-000239	C-CERAMIC,CHIP;0.1NF,5%,50V,C0G,TP,2012	
HC3L	AG000511	2203-000239	C-CERAMIC,CHIP;0.1NF,5%,50V,C0G,TP,2012	
UC81	AG000199	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012	
UC80	AG000199	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012	
UC4	AG000199	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012	
HC2R	AG000206	2203-000533	C-CERAMIC,CHIP;2.7nF,10%,50V,X7R,TP,2012	

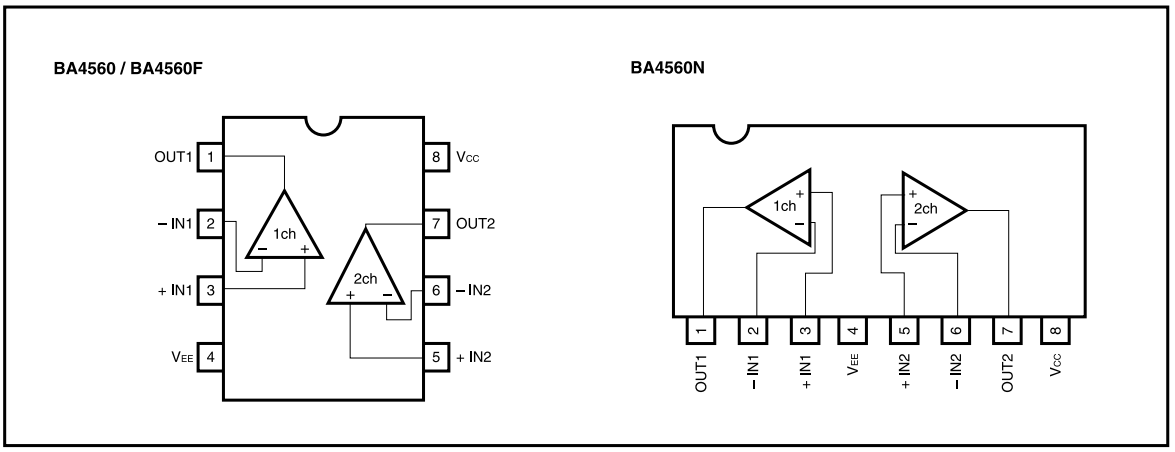
LOCATION	TOSHIBA PART NO.	SAMSUNG CODE NO.	Description;Specification	REMARK
HC2L	AG000206	2203-000533	C-CERAMIC,CHIP;2.7nF,10%,50V,X7R,TP,2012	
UC1A	AG000214	2203-000979	C-CERAMIC,CHIP;47nF,10%,50V,X7R,TP,2012	
HC1	AG000223	2203-001537	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012	
UC3	AG000239	2401-000243	C-AL;100uF,20%,10V,GP,6*5,2.5MM,TP	
UC5	AG000246	2401-000752	C-AL;220nF,20%,50V,GP,3*5,2.5MM,TP	
UC2	AG000262	2401-001952	C-AL;4.7uF,20%,50V,GP,TP,5x7mm,5mm	
UC0	AG000275	2409-000123	C-EDL;47000uF,4uA,5.5V,-,BK,-,5mm	
HL1R	AG000276	2701-000114	INDUCTOR-AXIAL;10uH,10%,2.5x3.4mm	
HL1L	AG000276	2701-000114	INDUCTOR-AXIAL;10uH,10%,2.5x3.4mm	
SW7	AG000286	3404-000165	SWITCH-TACT;12V,50mA,160gf,6x6mm,SPST	
SW6	AG000286	3404-000165	SWITCH-TACT;12V,50mA,160gf,6x6mm,SPST	
SW5	AG000286	3404-000165	SWITCH-TACT;12V,50mA,160gf,6x6mm,SPST	
SW4	AG000286	3404-000165	SWITCH-TACT;12V,50mA,160gf,6x6mm,SPST	
SW2	AG000286	3404-000165	SWITCH-TACT;12V,50mA,160gf,6x6mm,SPST	
SW3	AG000286	3404-000165	SWITCH-TACT;12V,50mA,160gf,6x6mm,SPST	
SW1	AG000286	3404-000165	SWITCH-TACT;12V,50mA,160gf,6x6mm,SPST	
PCB	AG000381	AH41-00585A	PCB;SD2900,EPOXY,2,0,1.6T,1.6T 163	SNA

9. IC Block Diagrams

9-1 Main

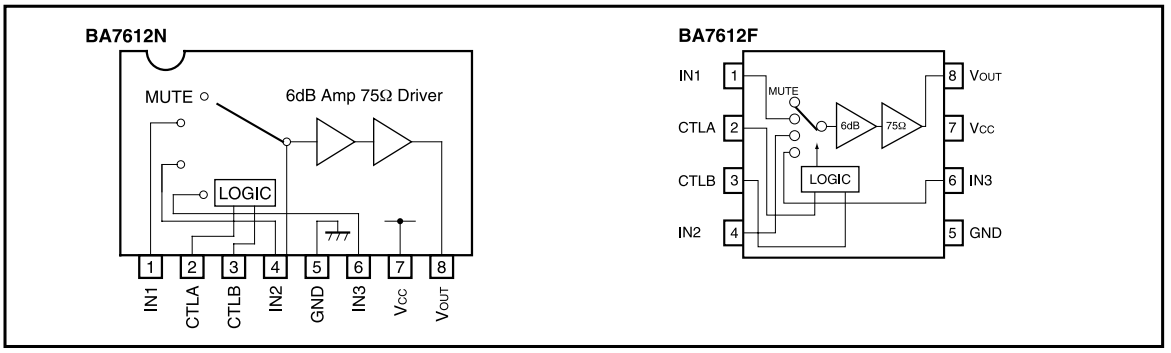
9-1-1. BA4560

●Block diagram



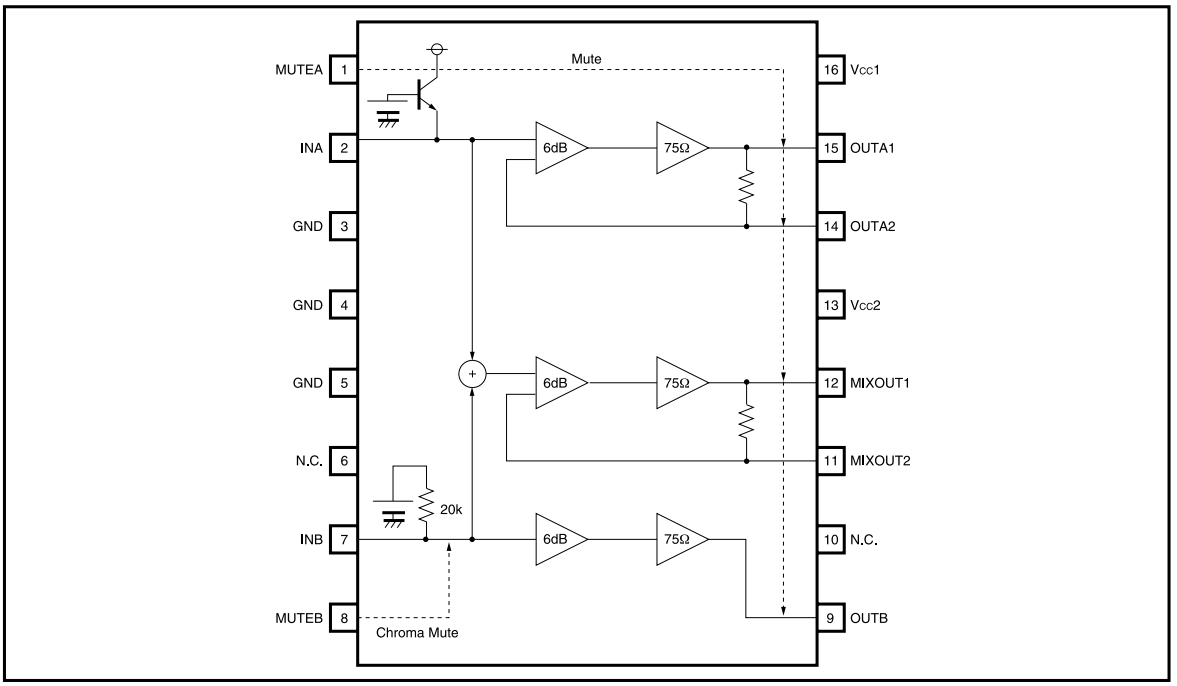
9-1-2. BA7612N

●Block diagram

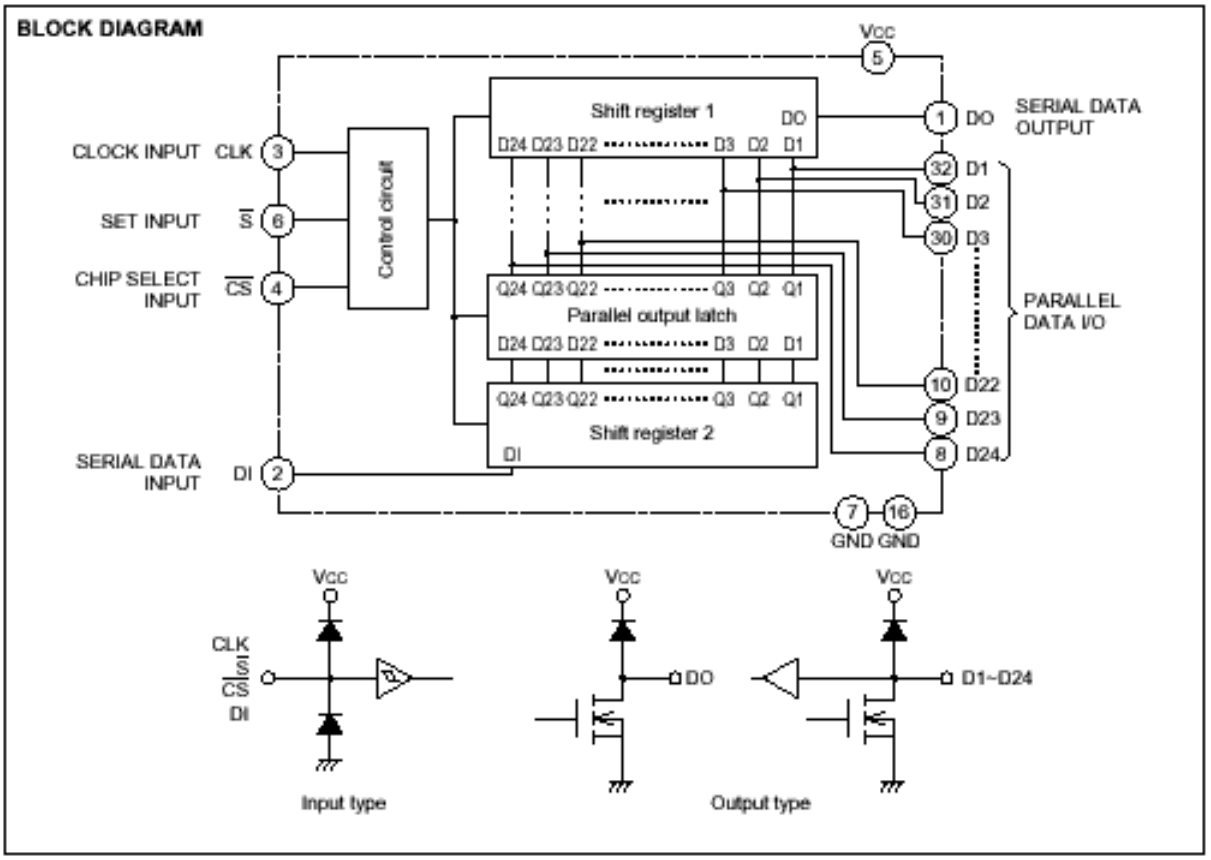


9-1-3. BA7665FS

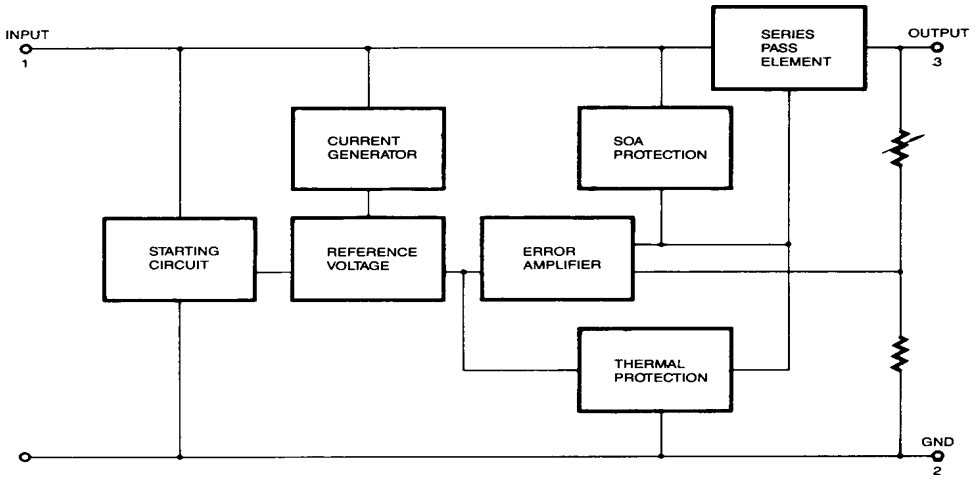
●Block diagram



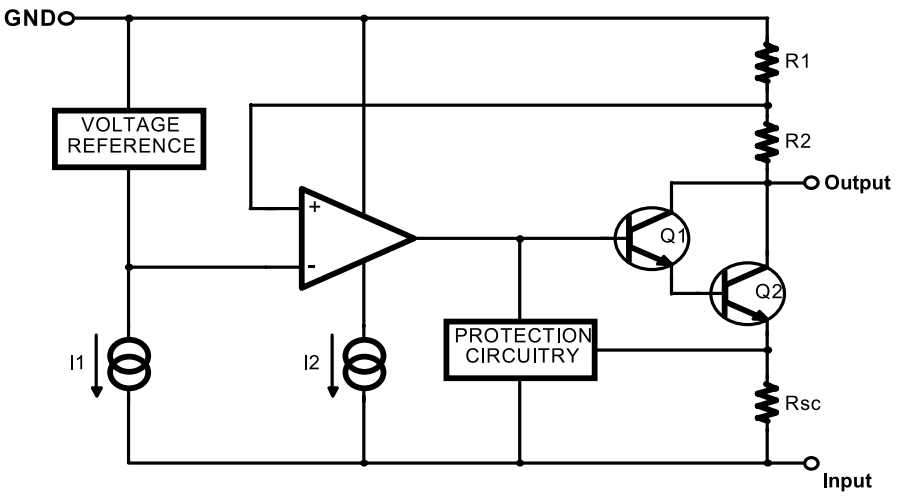
9-1-4. M66010AFP



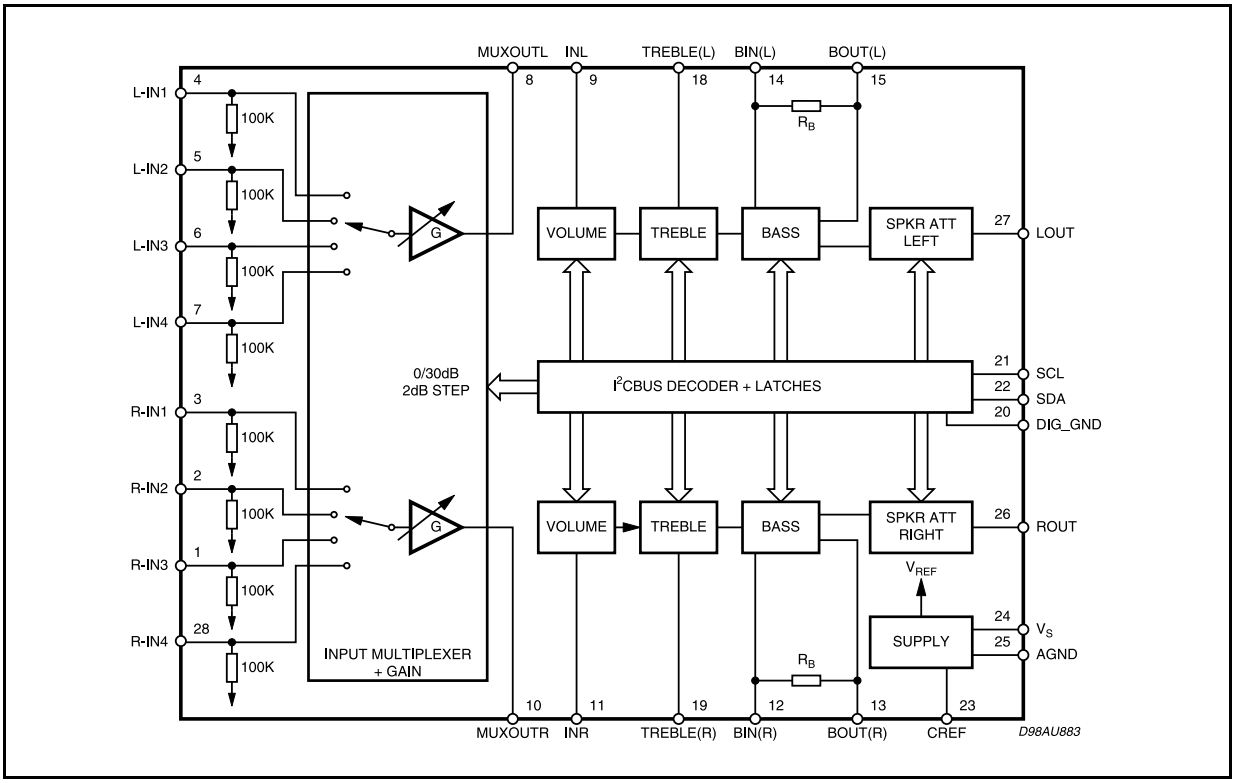
9-1-5. KA7805/ 7808/ 7812



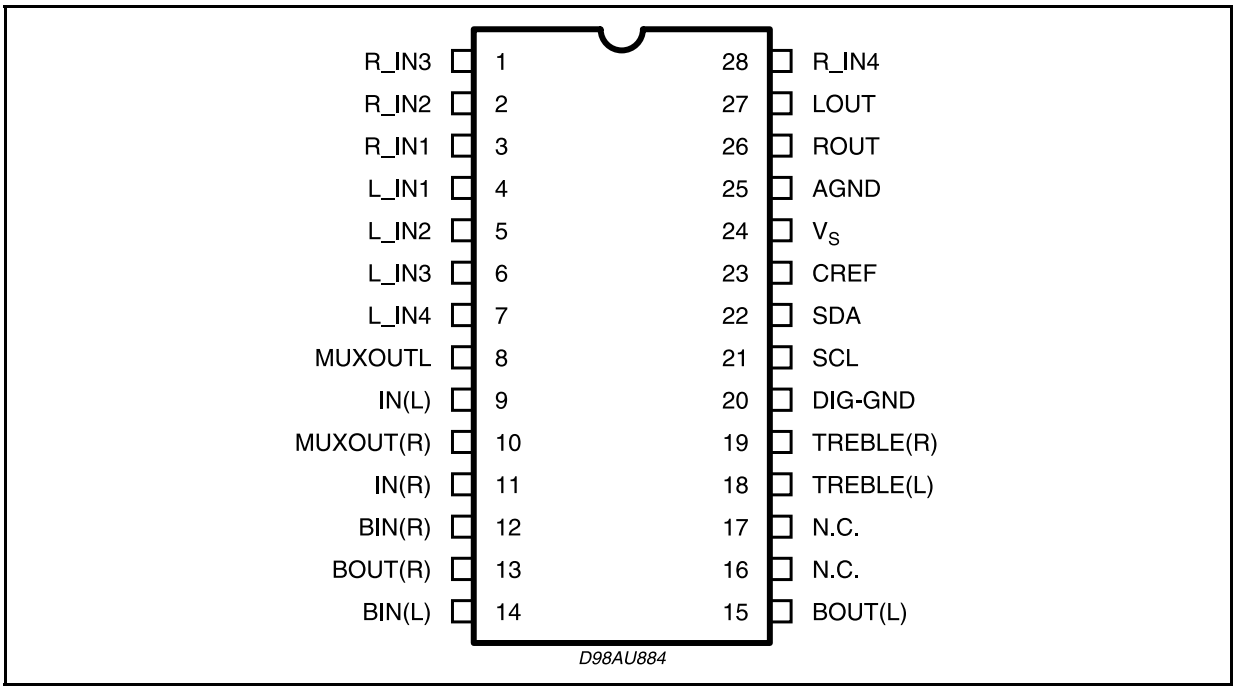
9-1-6. KA7912



BLOCK DIAGRAM



PIN CONNECTION (Top view)



ES60X8 PINOUT DIAGRAM

The identical device pinouts for the ES6008, ES6018, ES6028 and ES6038 are shown in Figure

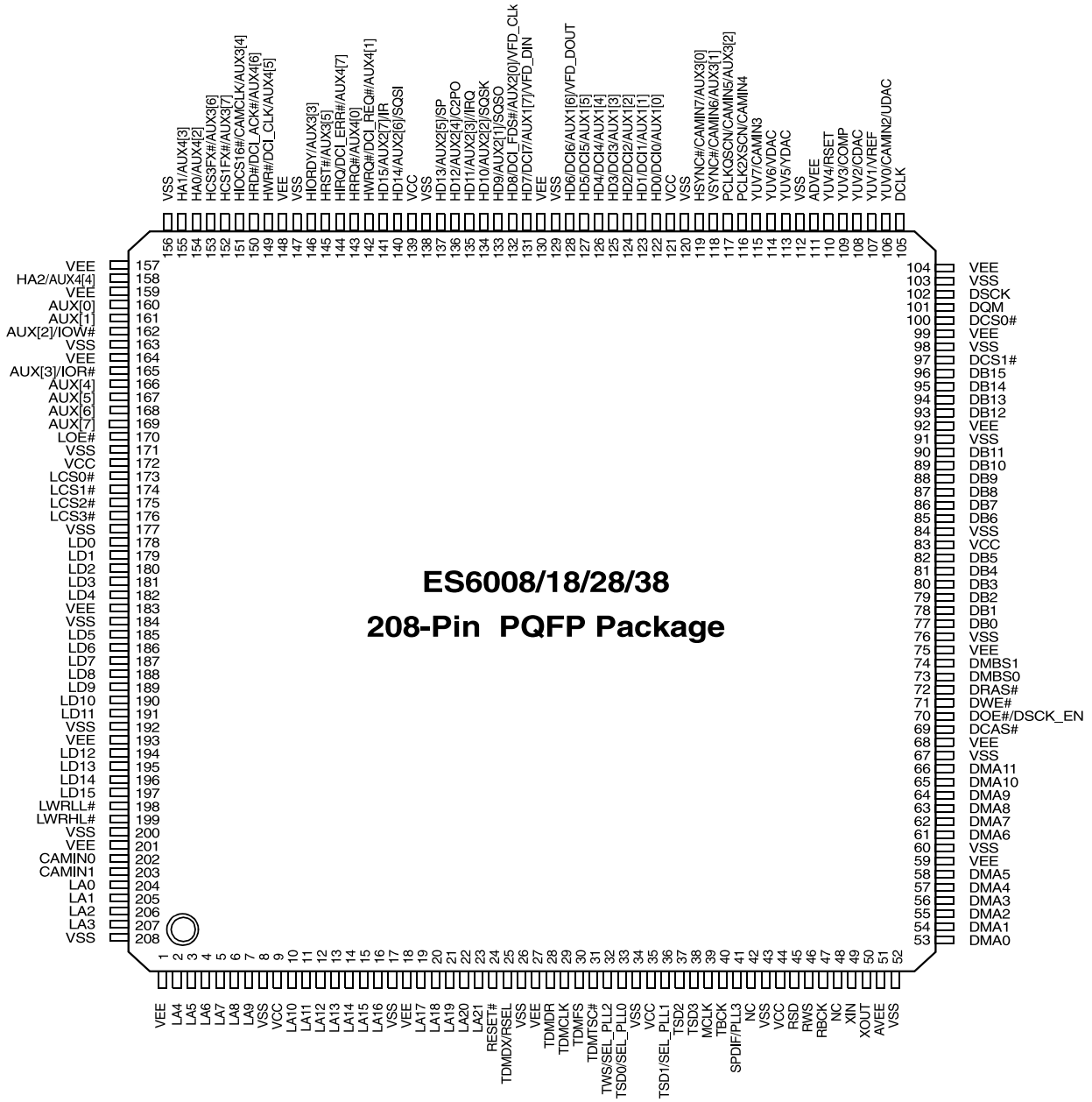


Figure ES60x8 Pinout

ES60X8 PIN DESCRIPTION

Table 1 lists the identical pin descriptions for the ES6008, ES6018, ES6028 and ES6038.

Table 1 ES60x8 Pin Description

<table>
<tr><th>Name</th><th>Number</th><th>I/O</th><th>Definition</th></tr>
<tr><td>VEE</td><td>1,18, 27, 59, 68, 75, 92, 99, 104, 130, 148, 157, 159, 164, 183, 193, 201</td><td>I</td><td>I/O power supply.</td></tr>
<tr><td>VSS</td><td>8, 17, 26, 34, 43, 52, 60, 67, 76, 84, 91, 98, 103, 112, 120, 129, 138, 147, 156, 163, 171, 177, 184, 192, 200, 208</td><td>I</td><td>Ground.</td></tr>
<tr><td>LA[21:0]</td><td>23:19, 16:10, 7:2, 207:204</td><td>O</td><td>Device address output.</td></tr>
<tr><td>VCC</td><td>9, 35, 44, 83, 121, 139, 172</td><td>I</td><td>Core power supply.</td></tr>
<tr><td>RESET#</td><td>24</td><td>I</td><td>Reset input, active low.</td></tr>
<tr><td>TDMDX</td><td rowspan="2">25</td><td>O</td><td>TDM transmit data.</td></tr>
<tr><td>RSEL</td><td>I</td><td>ROM Select.
<table>
<tr><th>RSEL</th><th>Selection</th></tr>
<tr><td>0</td><td>16-bit OM R</td></tr>
<tr><td>1</td><td>8-bit ROM</td></tr>
</table></td></tr>
<tr><td>TDMDR</td><td>28</td><td>I</td><td>TDM receive data.</td></tr>
<tr><td>TDMCLK</td><td>29</td><td>I</td><td>TDM clock input.</td></tr>
<tr><td>TDMFS</td><td>30</td><td>I</td><td>TDM frame sync.</td></tr>
<tr><td>TDMTSC#</td><td>31</td><td>O</td><td>TDM output enable.</td></tr>
<tr><td>TWS</td><td rowspan="2">32</td><td>O</td><td>Audio transmit frame sync.</td></tr>
<tr><td>SEL_PLL2</td><td>I</td><td>System and DSCK output clock frequency selection is made at the rising edge of RESET#. The matrix below lists the available clock frequencies and their respective PLL bit settings.
<table>
<tr><th>SEL_PLL2</th><th>SEL_PLL1</th><th>SEL_PLL0</th><th>Clock Type</th></tr>
<tr><td>0</td><td>0</td><td>0</td><td>VCO off.</td></tr>
<tr><td>0</td><td>0</td><td>1</td><td>DCLK</td></tr>
<tr><td>0</td><td>1</td><td>0</td><td>Bypass mode</td></tr>
<tr><td>0</td><td>1</td><td>1</td><td>DCLK x 2</td></tr>
<tr><td>1</td><td>0</td><td>0</td><td>DCLK x 4.5</td></tr>
<tr><td>1</td><td>0</td><td>1</td><td>DCLK x 3</td></tr>
<tr><td>1</td><td>1</td><td>0</td><td>DCLK x 3.5z</td></tr>
<tr><td>1</td><td>1</td><td>1</td><td>DCLK x 4</td></tr>
</table></td></tr>
<tr><td>TSD0</td><td rowspan="2">33</td><td>O</td><td>Audio transmit serial data port 0.</td></tr>
<tr><td>SEL_PLL0</td><td>I</td><td>Refer to the description and matrix for SEL_PLL2 pin 32.</td></tr>
<tr><td>TSD1</td><td rowspan="2">36</td><td>O</td><td>Audio transmit serial data port 1.</td></tr>
<tr><td>SEL_PLL1</td><td>I</td><td>Refer to the description and matrix for SEL_PLL2 pin 32.</td></tr>
<tr><td>TSD[2]</td><td>37</td><td>O</td><td>Audio transmit serial data output 2.</td></tr>
<tr><td>TSD[3]</td><td>38</td><td>O</td><td>Audio transmit serial data output 3.</td></tr>
</table>

Table 1 ES60x8 Pin Description (Continued)

<table>
<tr><th>Name</th><th>Number</th><th>I/O</th><th>Definition</th></tr>
<tr><td>MCLK</td><td>39</td><td>I/O</td><td>Audio master clock for audio DAC.</td></tr>
<tr><td>TBCK</td><td>40</td><td>O</td><td>Audio transmit bit clock.</td></tr>
<tr><td>SPDIF</td><td rowspan="2">41</td><td>O</td><td>S/PDIF output.</td></tr>
<tr><td>SEL_PLL3</td><td>I</td><td>Clock source select.
<table>
<tr><th>SEL_PLL3</th><th>Clock Source</th></tr>
<tr><td>0</td><td>Crystal oscillator</td></tr>
<tr><td>1</td><td>DCLK input</td></tr>
</table></td></tr>
<tr><td>NC</td><td>42, 48</td><td></td><td>No connect pins. Leave open.</td></tr>
<tr><td>RSD</td><td>45</td><td>I</td><td>Audio receive serial data.</td></tr>
<tr><td>RWS</td><td>46</td><td>I</td><td>Audio receive frame sync.</td></tr>
<tr><td>RBCK</td><td>47</td><td>I</td><td>Audio receive bit clock.</td></tr>
<tr><td>XIN</td><td>49</td><td>I</td><td>Crystal input.</td></tr>
<tr><td>XOUT</td><td>50</td><td>O</td><td>Crystal output.</td></tr>
<tr><td>AVEE</td><td>51</td><td>I</td><td>Analog power for PLL.</td></tr>
<tr><td>DMA[11:0]</td><td>66:61, 58:53</td><td>O</td><td>DRAM address bus [11:0].</td></tr>
<tr><td>DCAS#</td><td>69</td><td>O</td><td>DRAM column address strobe.</td></tr>
<tr><td>DOE#</td><td rowspan="2">70</td><td>O</td><td>DRAM output enable.</td></tr>
<tr><td>DSCK_EN</td><td>O</td><td>DRAM clock enable.</td></tr>
<tr><td>DWE#</td><td>71</td><td>O</td><td>DRAM write enable.</td></tr>
<tr><td>DRAS#</td><td>72</td><td>O</td><td>DRAM row address strobe.</td></tr>
<tr><td>DMBS0</td><td>73</td><td>O</td><td>SDRAM bank select 0.</td></tr>
<tr><td>DMBS1</td><td>74</td><td>O</td><td>SDRAM bank select 1.</td></tr>
<tr><td>DB[15:0]</td><td>96:93, 90:85, 82:77</td><td>I/O</td><td>DRAM data bus [15:0].</td></tr>
<tr><td>DCS[1:0]#</td><td>97,100</td><td>O</td><td>SDRAM chip select [1:0].</td></tr>
<tr><td>DQM</td><td>101</td><td>O</td><td>Data input/output mask.</td></tr>
<tr><td>DSCK</td><td>102</td><td>O</td><td>Output clock to SDRAM.</td></tr>
<tr><td>DCLK</td><td>105</td><td>I</td><td>27 MHz clock input to PLL.</td></tr>
<tr><td>YUV0</td><td rowspan="3">106</td><td>O</td><td>YUV0 pixel output data.</td></tr>
<tr><td>CAMIN2</td><td>I</td><td>Camera input 2.</td></tr>
<tr><td>UDAC</td><td>O</td><td>Video DAC output.
<table>
<tr><th>Mode</th><th>YDAC</th><th>UDAC</th><th>VDAC</th><th>CDAC</th></tr>
<tr><td>A</td><td>Y</td><td>C</td><td>Composite</td><td>C</td></tr>
<tr><td>B</td><td>Y</td><td>Composite</td><td>Composite</td><td>C</td></tr>
<tr><td>C</td><td>Y</td><td>U</td><td>Composite</td><td>V</td></tr>
<tr><td>D</td><td>Y</td><td>U</td><td>C</td><td>V</td></tr>
</table>
Y: Luma component for YUV and Y/C processing.
C: Chrominance signal for Y/C processing.
U: Chrominance component signal for YUV mode.
V: Chrominance component signal for YUV mode.</td></tr>
</table>

Table 1 ES60x8 Pin Description (Continued)

Name	Number	I/O	Definition
YUV1	107	O	YUV1 pixel output data.
VREF		I	Internal voltage reference to video DAC. Bypass to ground with 0.1 F capacitor.
YUV2	108	O	YUV2 pixel output data.
CDAC		O	Video DAC output. Refer to description and matrix for UDAC pin 106.
YUV3	109	O	YUV3 pixel output data.
COMP		I	Compensation input. Bypass to ADVEE with 0.1 F capacitor.
YUV4	110	O	YUV4 pixel output data.
RSET		I	DAC current adjustment resistor input.
ADVEE	111	I	Analog power for video DAC.
YUV5	113	O	YUV5 pixel output data.
YDAC		O	Video DAC output. Refer to description and matrix for UDAC pin 106.
YUV6	114	O	YUV6 pixel output data.
VDAC		O	Video DAC output. Refer to description and matrix for UDAC pin 106.
YUV7	115	O	YUV7 pixel output data.
CAMIN3		I	Camera YUV 3.
PCLK2XSCN	116	I/O	27-MHz video output pixel clock.
CAMIN4		I	Camera YUV 4.
PCLKQSCN	117	O	13.5-MHz video output pixel clock.
CAMIN5		I	Camera YUV 5.
VSYNC#	118	I/O	Vertical sync, active low.
CAMIN6		I	Camera YUV 6.
HSYNC#	119	I/O	Horizontal sync, active low.
CAMIN7		I	Camera YUV 7.
HD[5:0]	127:122	I/O	Host data I/O [5:0].
DCI[5:0]		I/O	DVD channel data I/O [5:0].
AUX1[5:0]		I/O	Aux1 data I/O [5:0].
HD[6]	128	I/O	Host data I/O [6].
DCI[6]		I/O	DVD channel data I/O [6].
AUX1[6]		I/O	Aux1 data I/O [6].
VFD_DOUT		I	VFD data output.
HD[7]	131	I/O	Host data I/O [7].
DCI[7]		I/O	DVD channel data I/O [7].
AUX1[7]		I/O	Aux1 data I/O [7:0].
VFD_DIN		I	VFD data input.
HD[8]	132	I/O	Host data bus 8.
DCI_FDS#		I/O	DVD input sector start.
AUX2[0]		I/O	Aux2 data I/O 0.
VFD_CLK		I	VFD clock input.
HD[9]	133	I/O	Host data bus line 9.
AUX2[1]		I/O	Aux2 data I/O [1] when selected.
SQSQ		I	Subcode-Q data.
HD[10]	134	I/O	Host data bus line10.
AUX2[2]		I/O	Aux2 data I/O [2] when selected.
SQSK		I	Subcode-Q clock.

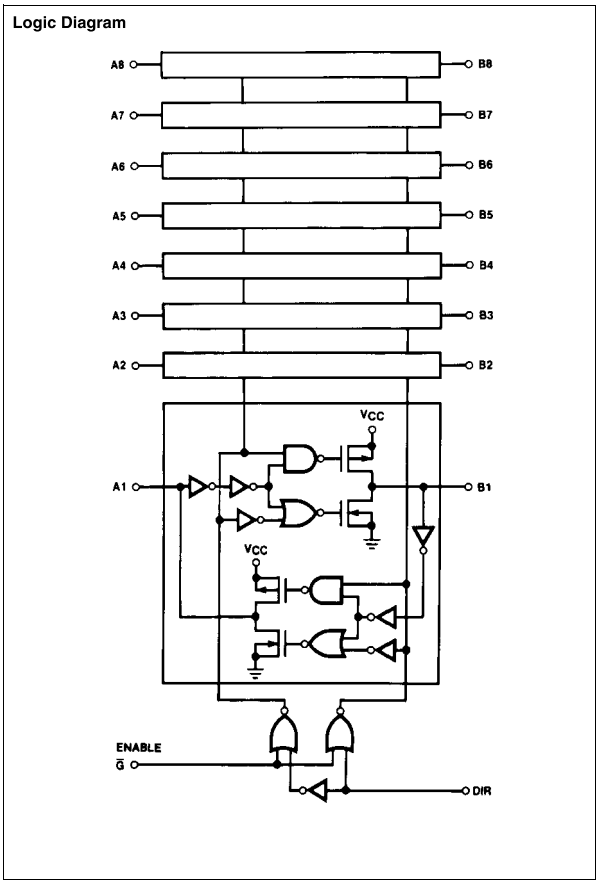
Table 1 ES60x8 Pin Description (Continued)

Name	Number	I/O	Definition
HD[11]	135	I/O	Host data bus line11.
AUX2[3]		I/O	Aux2 data I/O [3] when selected.
IRQ		O	IRQ output.
HD[12]	136	I/O	Host data bus line12.
AUX2[4]		I/O	Aux2 data I/O [4] when selected.
C2PO		I	C2PO error correction flag from CD-ROM.
HD[13]	137	I/O	Host data bus line13.
AUX2[5]		I/O	Aux2 data I/O [5] when selected.
SP		I	16550 UART serial port input.
HD[14]	140	I/O	Host data bus line14.
AUX2[6]		I/O	Aux2 data I/O [6] when selected.
SQSI		I	Subcode-Q sync.
HD[15]	141	I/O	Host data bus line15.
AUX2[7]		I/O	Aux2 data I/O [7] when selected.
IR		I	IR remote control input.
HWRQ#	142	O	Host write request.
DCI_REQ#		O	DVD control interface request.
AUX4[1]		I/O	Aux4 data I/O 1.
HRRQ#	143	O	Host read request.
AUX4[0]		I/O	Aux4 data I/O 0.
HIRQ	144	I/O	Host interrupt.
DCI_ERR#		I/O	DVD channel data error.
AUX4[7]		I/O	Aux4 data I/O 7.
HRST#	145	O	Host reset.
AUX3[5]		I/O	Aux3 data I/O 5.
HIORDY	146	I	Host I/O ready.
AUX3[3]		I/O	Aux3 data I/O 3.
HWR#	149	I/O	Host write.
DCI_CLK		I/O	DVD channel data clock.
AUX4[5]		I/O	Aux4 data I/O 5.
HRD#	150	O	Host read.
DCI_ACK#		O	DVD channel data valid.
AUX4[6]		I/O	Aux4 data I/O 6.
HIOCS16#	151	I	Device 16-bit data transfer.
CAMCLK		I	Camera port pixel clock input.
AUX3[4]		I/O	Aux3 data I/O 4.
HCS1FX#	152	O	Host select 1.
AUX3[7]		I/O	Aux3 data I/O 7.
HCS3FX#	153	O	Host select 3.
AUX3[6]		I/O	Aux3 data I/O 6.
HA[2:0]	158, 155:154	I/O	Host address bus.
AUX4[4:2]		I/O	Aux4 data I/Os [4:2].
AUX[1:0]	160	I/O	Auxiliary ports 1:0.

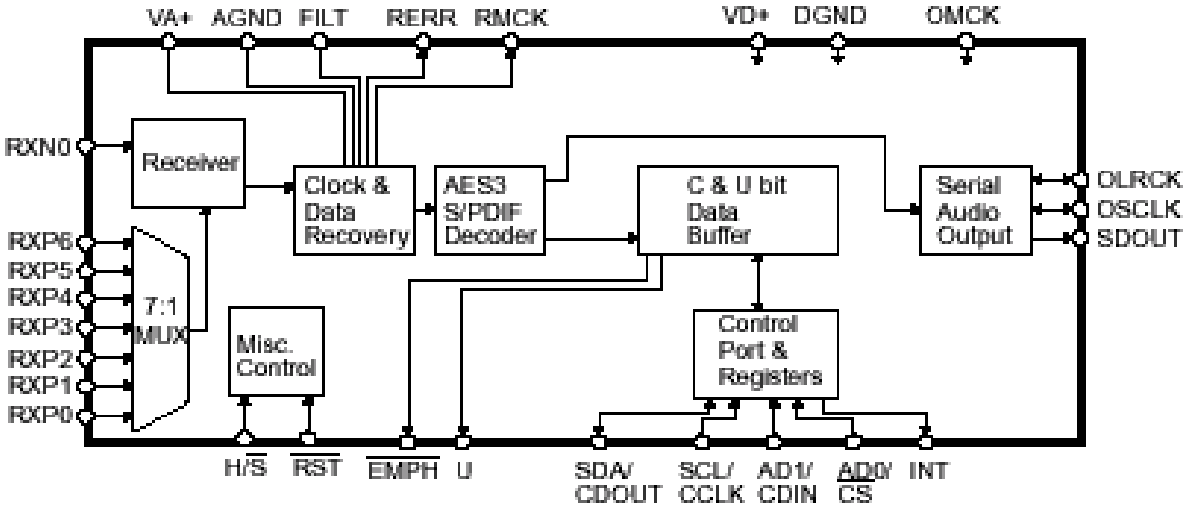
Table 1 ES60x8 Pin Description (Continued)

Name	Number	I/O	Definition
AUX[2]	162	I/O	Auxiliary port 2.
IOW#		O	I/O Write strobe.
AUX[3]	165	I/O	Auxiliary port 3.
IOR#		O	I/O Read strobe.
AUX[7:3]	169:166	I/O	Auxiliary ports 7:3.
LOE#	170	O	Device output enable.
LCS[3:0]#	176:173	O	Chip select [3:0].
LD[15:0]	197:194, 191:185, 182:178	I/O	EPROM device data bus.
LWRLL#	198	O	Device low-byte write enable.
LWRHL#	199	O	Device high-byte write enable.
CAMIN0	202	I	Camera YUV 0.
CAMIN1	203	I	Camera YUV 1.

9-2-2. 74HCT245

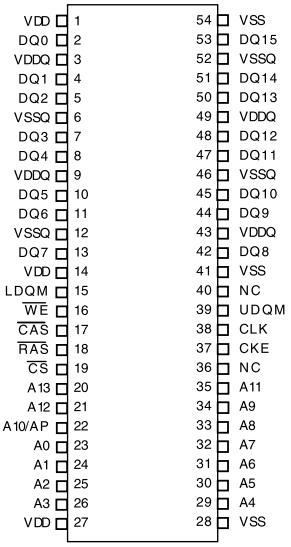


9-2-3. CS8415

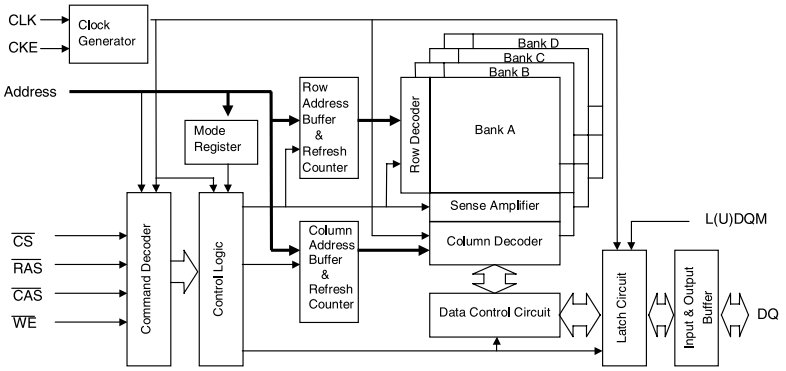


PIN ASSIGNMENT

Top View



FUNCTIONAL BLOCK DIAGRAM

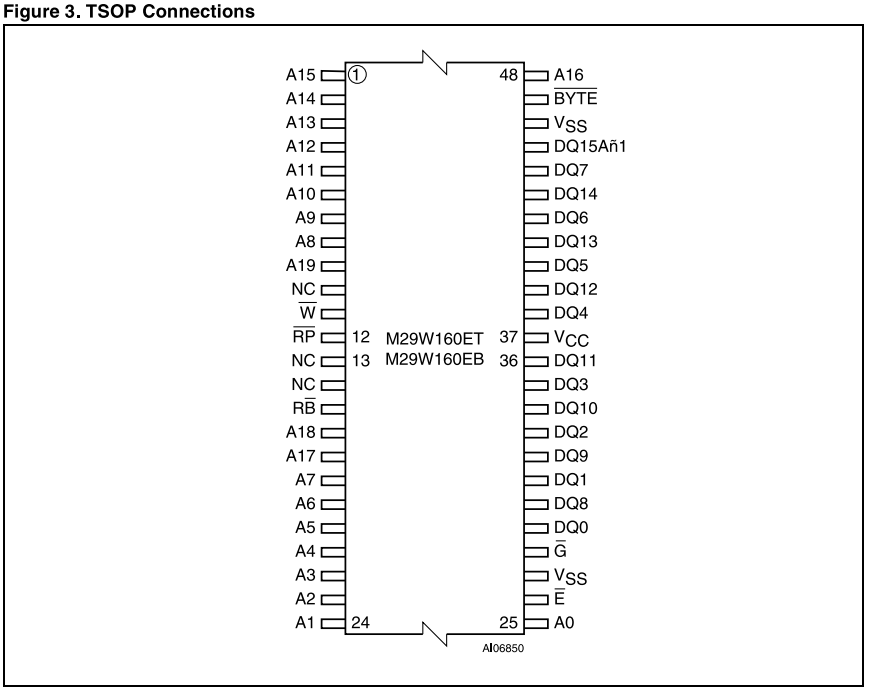


PIN FUNCTION DESCRIPTION

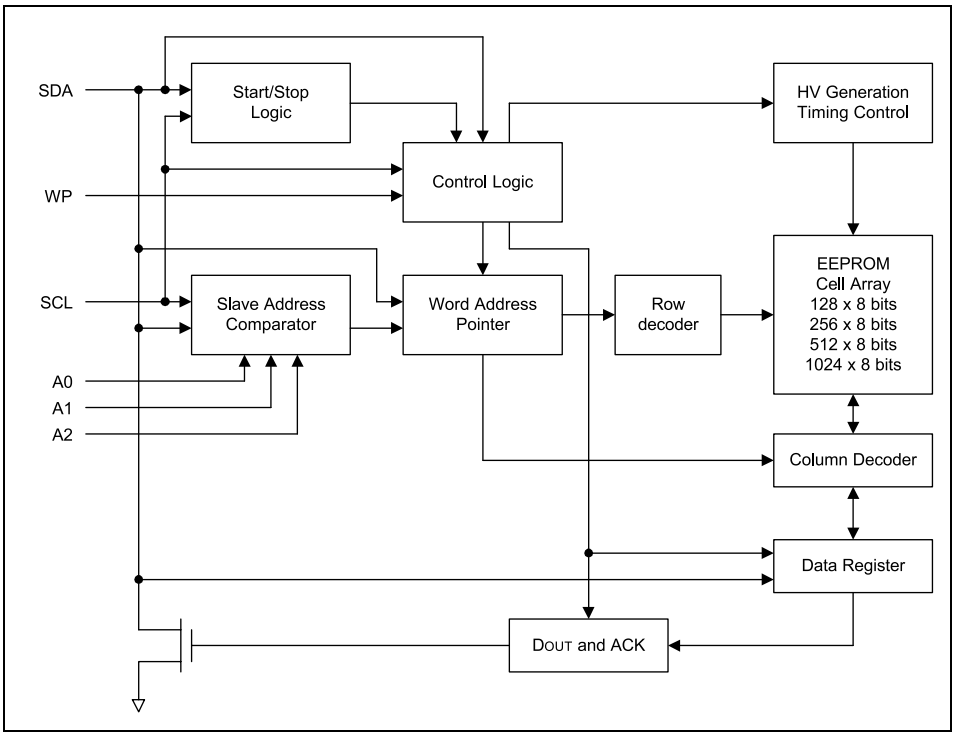
PIN	NAME	INPUT FUNCTION
CLK	System Clock	Active on the positive going edge to sample all inputs
$\overline{CS}$	Chip Select	Disables or enables device operation by masking or enabling all inputs except CLK , CKE and L(U)DQM
CKE	Clock Enable	Masks system clock to freeze operation from the next clock cycle. CKE should be enabled at least one cycle prior new command. Disable input buffers for power down in standby.
A0 ~ A11	Address	Row / column address are multiplexed on the same pins. Row address : RA0~RA11, column address : CA0~CA7
A12 , A13	Bank Select Address	Selects bank to be activated during row address latch time. Selects bank for read / write during column address latch time.
$\overline{RAS}$	Row Address Strobe	Latches row addresses on the positive going edge of the CLK with $\overline{RAS}$ low. Enables row access & precharge.
$\overline{CAS}$	Column Address Strobe	Latches column address on the positive going edge of the CLK with $\overline{CAS}$ low. Enables column access.
$\overline{WE}$	Write Enable	Enables write operation and row precharge. Latches data in starting from $\overline{CAS}$, $\overline{WE}$ active.
L(U)DQM	Data Input / Output Mask	Makes data output Hi-Z, t_{SHZ} after the clock and masks the output. Blocks data input when L(U)DQM active.
DQ0 ~ DQ15	Data Input / Output	Data inputs / outputs are multiplexed on the same pins.
VDD / VSS	Power Supply / Ground	Power and ground for the input buffers and the core logic.
VDDQ / VSSQ	Data Output Power / Ground	Isolated power supply and ground for the output buffers to provide improved noise immunity.
NC	No Connection	This pin is recommended to be left No Connection on the device.

9-2-5. M29W160E

Figure 3. TSOP Connections



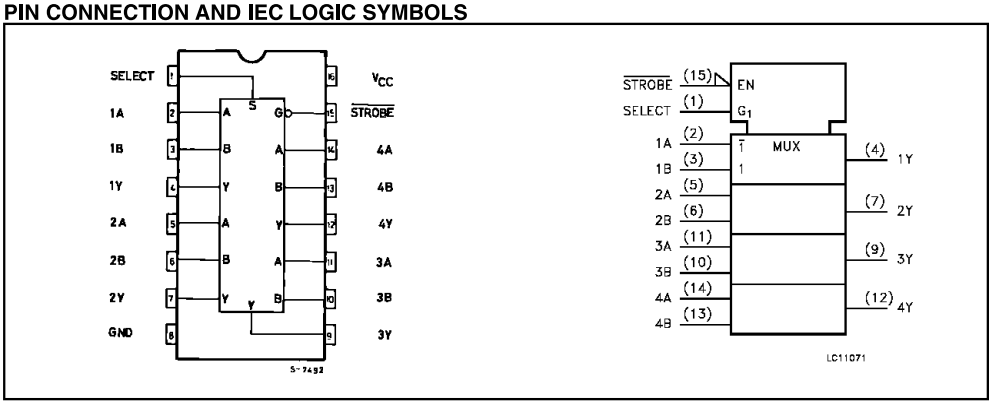
9-2-6. S524C20D21_20D41



S524C20D11/20D21/80D41/80D81 Block Diagram

9-2-7. STM_74LCX157

PIN CONNECTION AND IEC LOGIC SYMBOLS

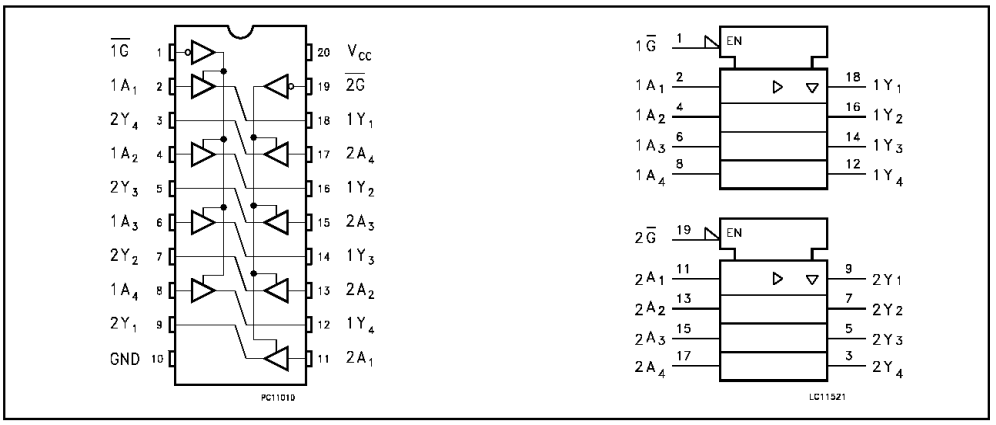


PIN DESCRIPTION

PIN No	SYMBOL	NAME AND FUNCTION
1	SELECT	Common Data Select Inputs
2, 5, 11, 14	1A to 4A	Data Inputs From Source A
3, 6, 10, 13	1B to 4B	Data Inputs From Source B
4, 7, 9, 12	1Y to 4Y	Multiplexer Outputs
15	$\overline{STROBE}$	Strobe Input
8	GND	Ground (0V)
16	V_{CC}	Positive Supply Voltage

9-2-8. STM_74LCX244

PIN CONNECTION AND IEC LOGIC SYMBOLS



PIN DESCRIPTION

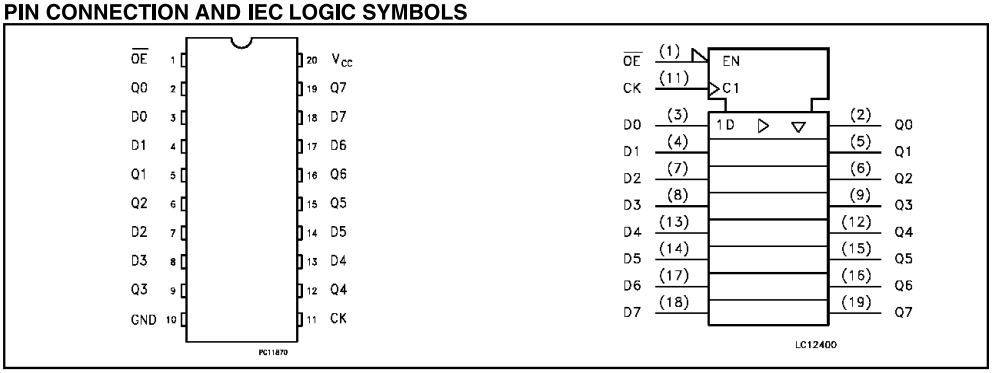
PIN No	SYMBOL	NAME AND FUNCTION
1	$\overline{1G}$	Output Enable Input
2, 4, 6, 8	1A1 to 1A4	Data Inputs
9, 7, 5, 3	2Y1 to 2Y4	Data Outputs
11, 13, 15, 17	2A1 to 2A4	Data Inputs
18, 16, 14, 12	1Y1 to 1Y4	Data Outputs
19	$\overline{2G}$	Output Enable Input
10	GND	Ground (0V)
20	V_{CC}	Positive Supply Voltage

TRUTH TABLE

INPUT		OUTPUT
$\overline{G}$	An	Yn
L	L	L
L	H	H
H	X	Z

X : Don't Care
Z : High Impedance

PIN CONNECTION AND IEC LOGIC SYMBOLS



PIN DESCRIPTION

PIN No	SYMBOL	NAME AND FUNCTION
1	$\overline{OE}$	3 State Output Enable Input (Active LOW)
2, 5, 6, 9, 12, 15, 16, 19	Q0 to Q7	3-State Outputs
3, 4, 7, 8, 13, 14, 17, 18	D0 to D7	Data Inputs
11	CK	Clock Input (LOW to HIGH edge triggered)
10	GND	Ground (0V)
20	V_{CC}	Positive Supply Voltage

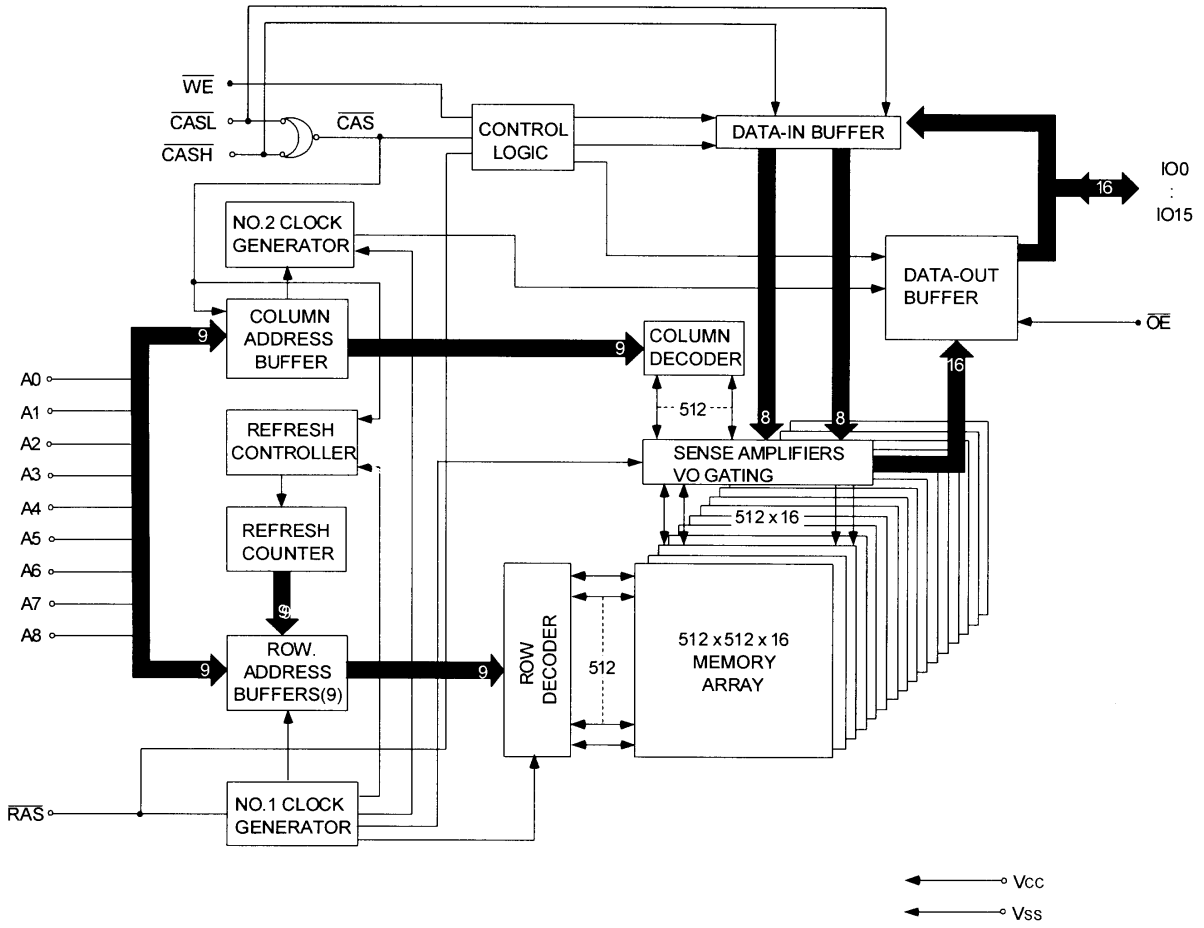
TRUTH TABLE

INPUT			OUTPUT
$\overline{OE}$	CK	D	Q
H	X	X	Z
L	↓	X	NO CHANGE
L	↑	L	L
L	↑	H	H

X : Don't Care
Z : High Impedance

9-3-1. M11B416256A

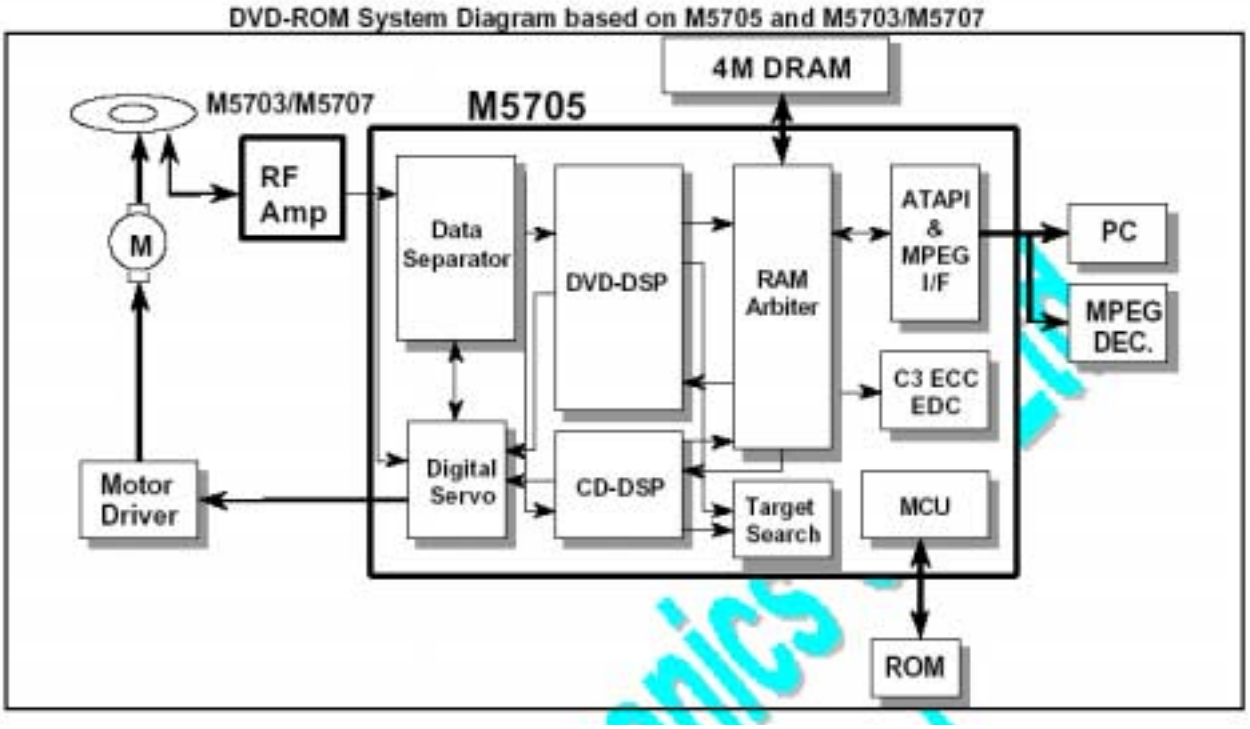
FUNCTIONAL BLOCK DIAGRAM



PIN DESCRIPTIONS

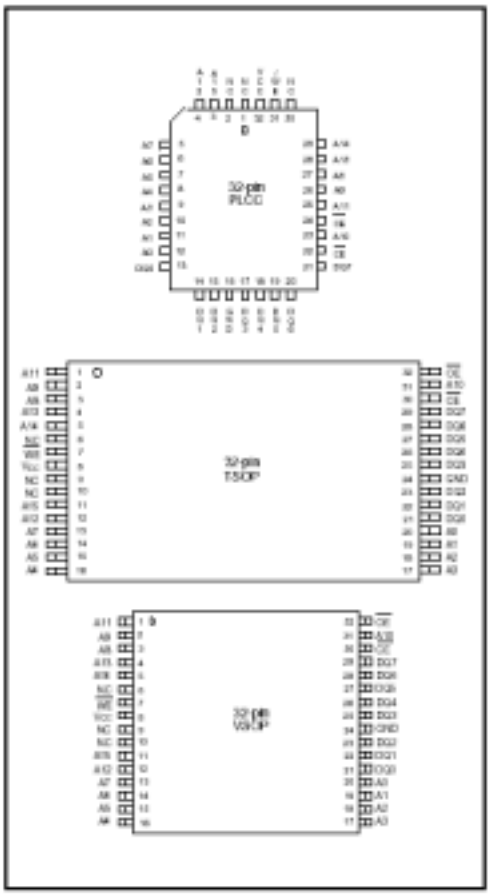
PIN NO.	SYM.	TYPE	DESCRIPTION
16~19,22~26	A0~A8	Input	Address Input
14	$\overline{RAS}$	Input	Row Address Strobe
28	$\overline{CASH}$	Input	Column Address Strobe/Upper Byte Control
29	$\overline{CASL}$	Input	Column Address Strobe/Lower Byte Control
13	$\overline{WE}$	Input	Write Enable
27	$\overline{OE}$	Input	Output Enable
2~5,7~10,31~34,36~39	I/O0 ~ I/O15	Input/Output	Data Input/Output
1,6,20	Vcc	Supply	Power, 5V
21,35,40	Vss	Ground	Ground
11,12,15,30	NC	-	No Connect

9-3-2. M5705

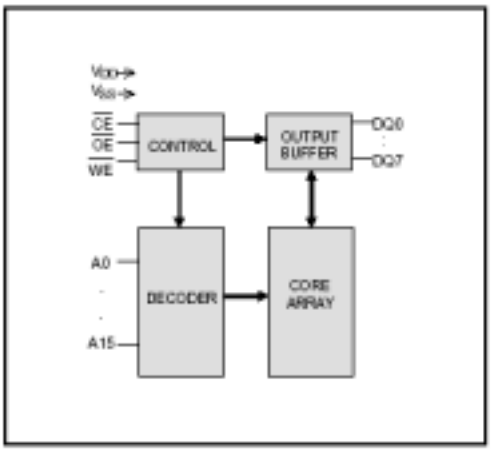


9-3-3. W29EE512F1

PIN CONFIGURATIONS



BLOCK DIAGRAM



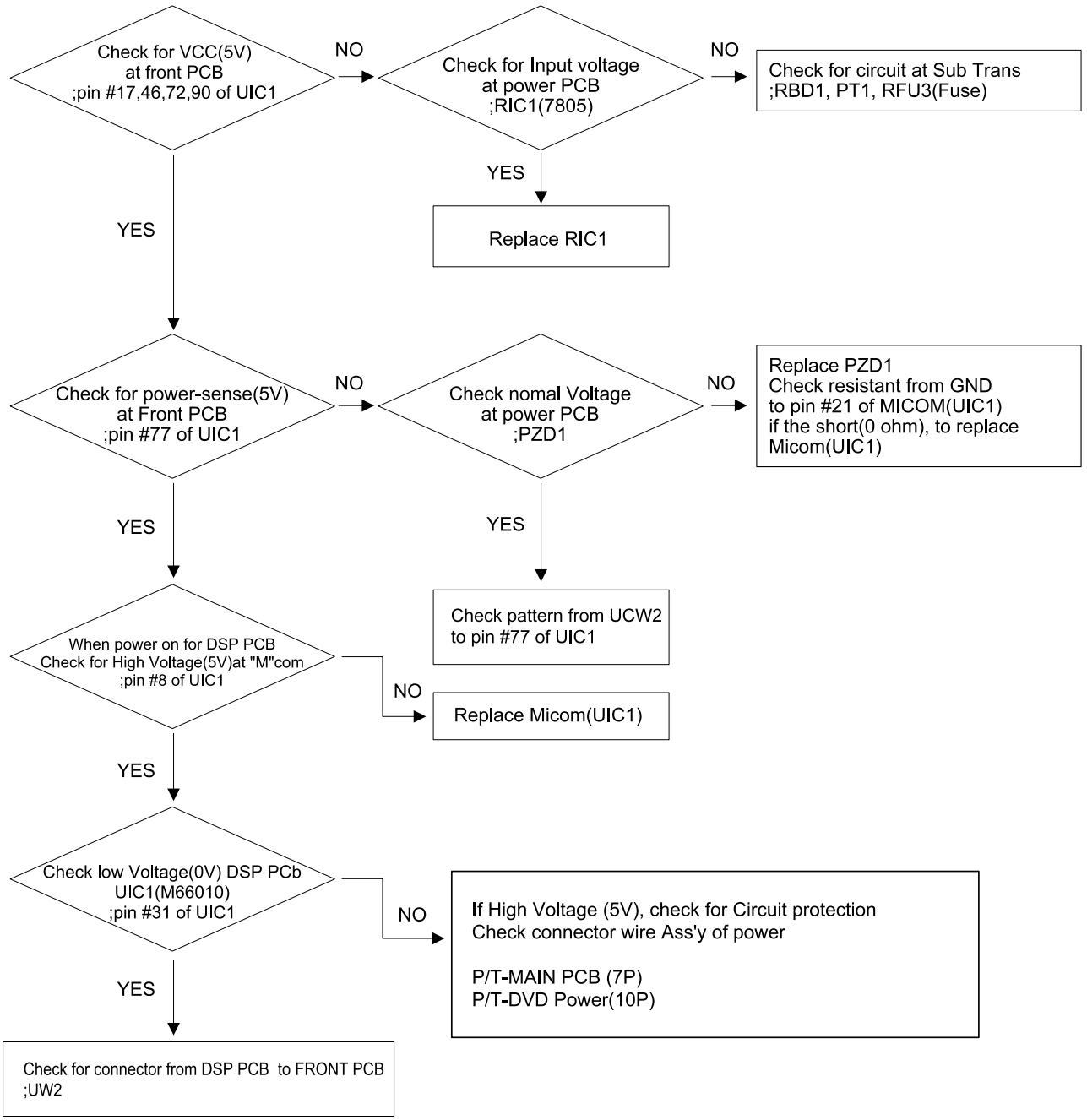
PIN DESCRIPTION

SYMBOL	PIN NAME
A0–A15	Address Inputs
DQ0–DQ7	Data Inputs/Outputs
$\overline{CE}$	Chip Enable
$\overline{OE}$	Output Enable
$\overline{WE}$	Write Enable
VCC	Power Supply
GND	Ground
NC	No Connection

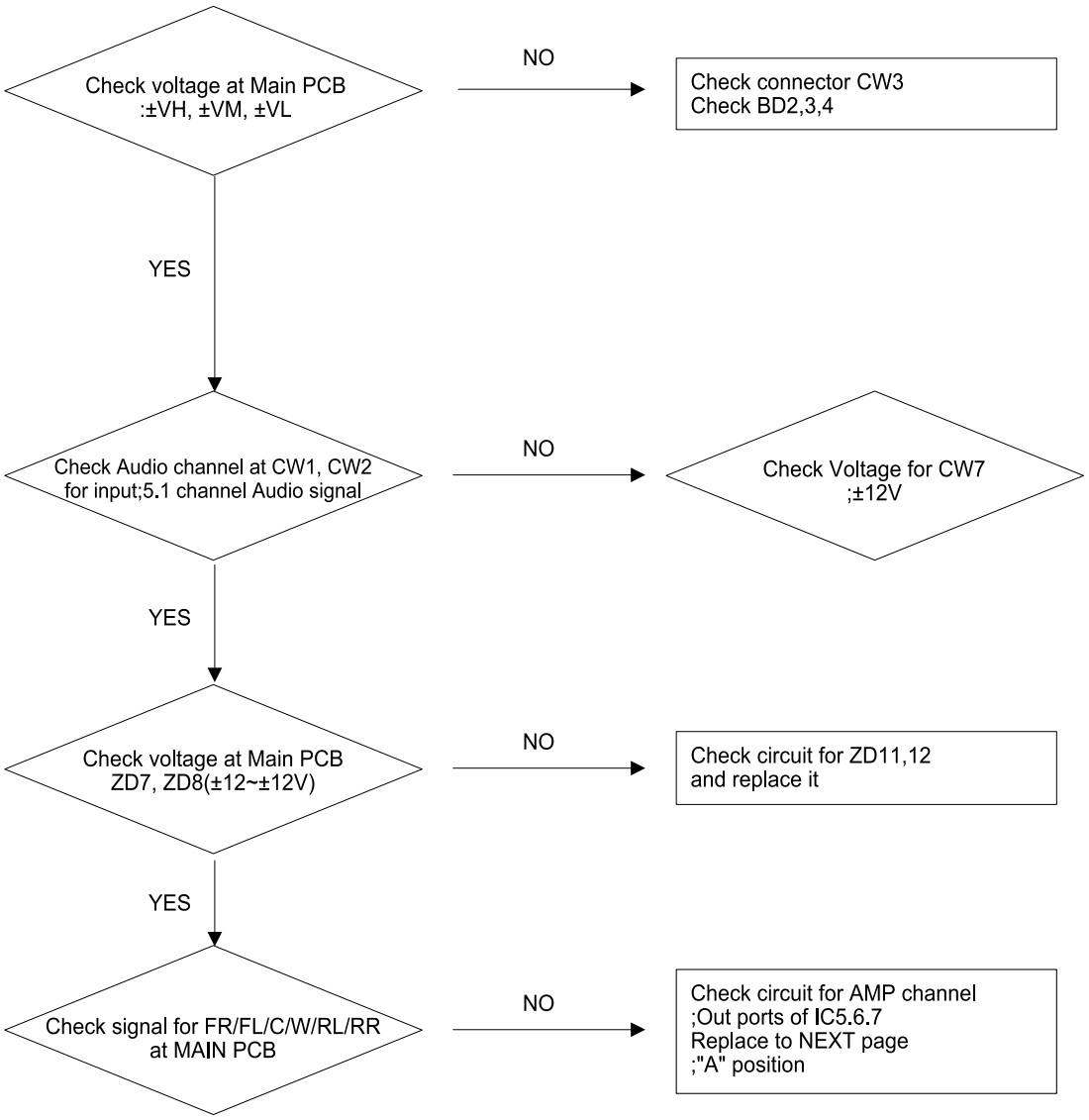
10. TroubleShooting

10-1 Main

1.POWER

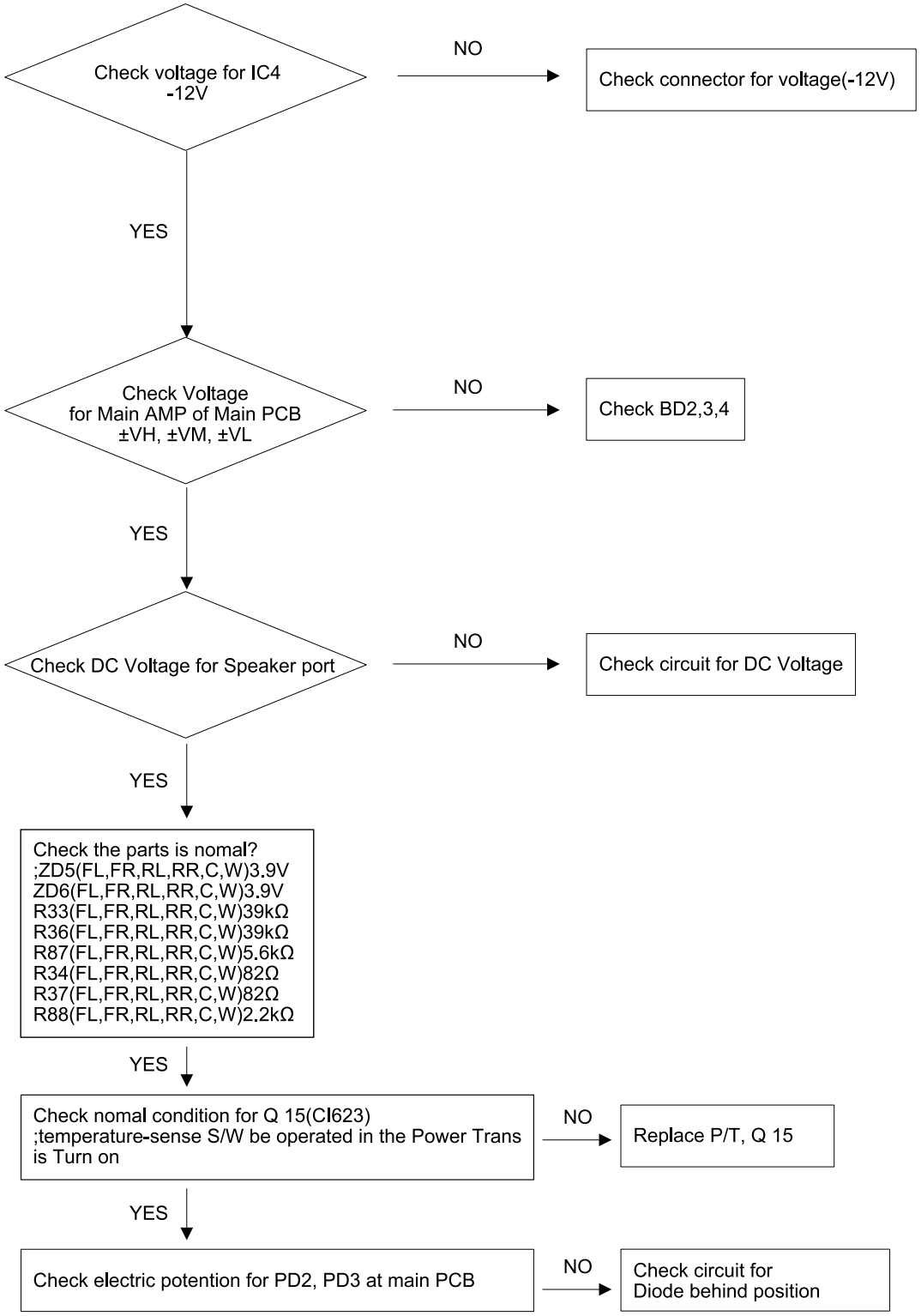

Check for VCC(5V) at front PCB ;pin #17,46,72,90 of UIC1
NO
Check for Input voltage at power PCB ;RIC1(7805)
NO
Check for circuit at Sub Trans ;RBD1, PT1, RFU3(Fuse)
YES
Replace RIC1
YES
Check for power-sense(5V) at Front PCB ;pin #77 of UIC1
NO
Check nomal Voltage at power PCB ;PZD1
NO
Replace PZD1 Check resistant from GND to pin #21 of MICOM(UIC1) if the short(0 ohm), to replace Micom(UIC1)
YES
YES
Check pattern from UCW2 to pin #77 of UIC1
When power on for DSP PCB Check for High Voltage(5V)at "M"com ;pin #8 of UIC1
NO
Replace Micom(UIC1)
YES
Check low Voltage(0V) DSP PCb UIC1(M66010) ;pin #31 of UIC1
NO
If High Voltage (5V), check for Circuit protection
Check connector wire Ass'y of power
P/T-MAIN PCB (7P)
P/T-DVD Power(10P)
YES
Check for connector from DSP PCB to FRONT PCB ;UW2

2.OUTPUT

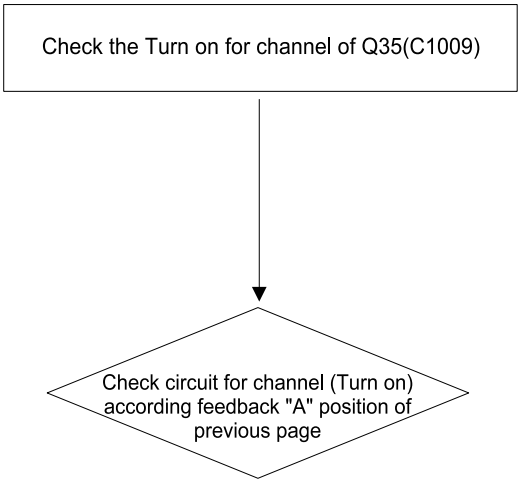

Check voltage at Main PCB
:±VH, ±VM, ±VL
NO
Check connector CW3
Check BD2,3,4
YES
Check Audio channel at CW1, CW2
for input;5.1 channel Audio signal
NO
Check Voltage for CW7
;±12V
YES
Check voltage at Main PCB
ZD7, ZD8(±12~±12V)
NO
Check circuit for ZD11,12
and replace it
YES
Check signal for FR/FL/C/W/RL/RR
at MAIN PCB
NO
Check circuit for AMP channel
;Out ports of IC5.6.7
Replace to NEXT page
;"A" position

3. Protection(When High Voltage at Protection port)

3-1 In this case “LOW” for, Base port of Q 12(R2003 TR)at MAIN PCB



3-2 In this case “LOW” for Base of Q 13(A733)at Main PCB


Check the Turn on for channel of Q35(C1009)
Check circuit for channel (Turn on) according feedback "A" position of previous page

3-3 Check the Connector Wire Ass’y Connection of each PCB

;DVD MECHA-Main PCB (8P, PW4)
;POWER TRANS-Main PCB (CW3)
;POWER TRANS-Main PCB (PW2)
;POWER TRANS-Main PCB (PW1)

1. Initial operation after power ON

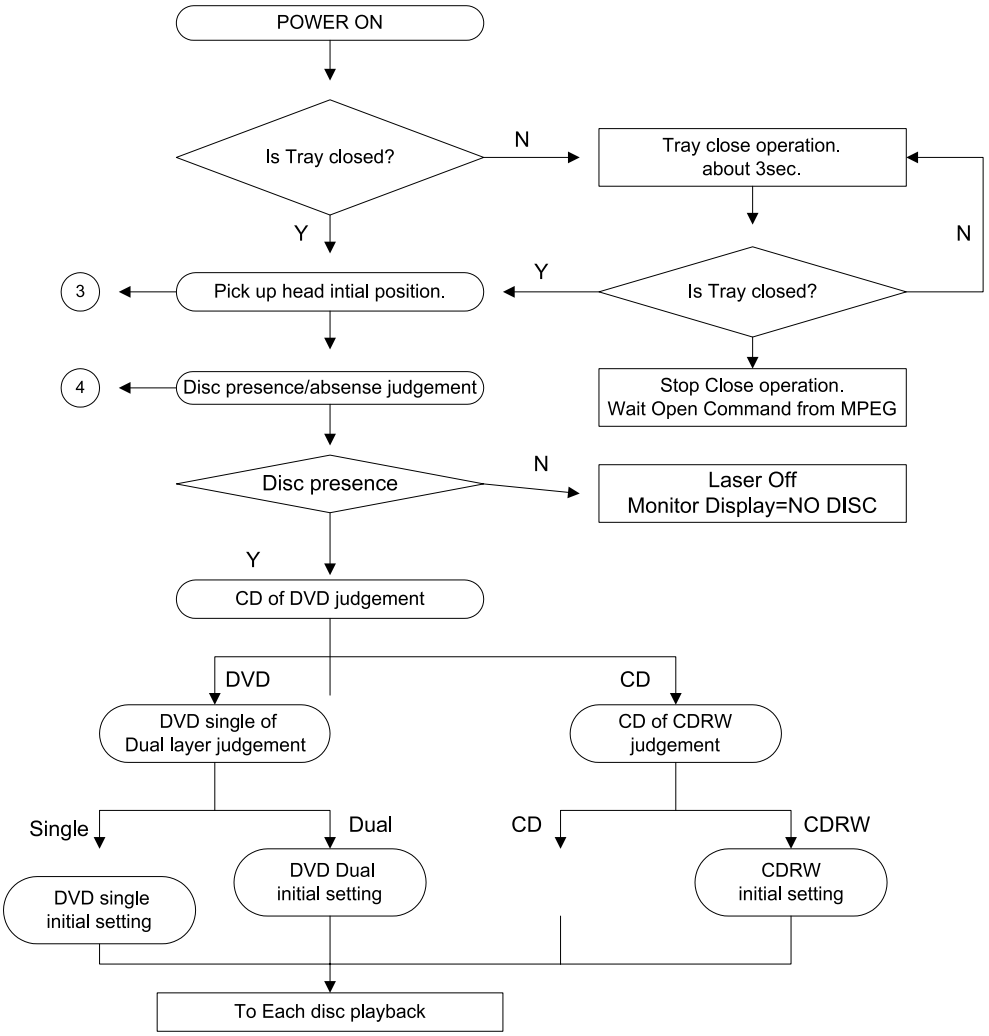
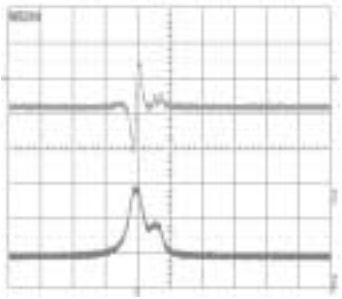


Fig. 1-1

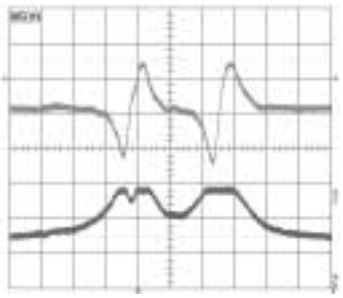
DVD single (single-layer) disc
Detetion waveform



V : 1V/div
H : 5ns/div

Fig. 1-2

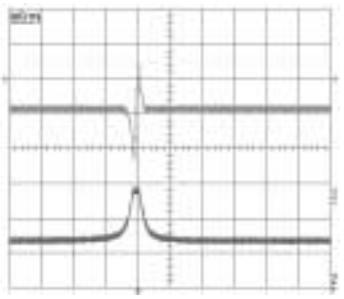
DVD dual (dual-layer) disc
Detetion waveform



V : 1V/div
H : 5ns/div

Fig. 1-3

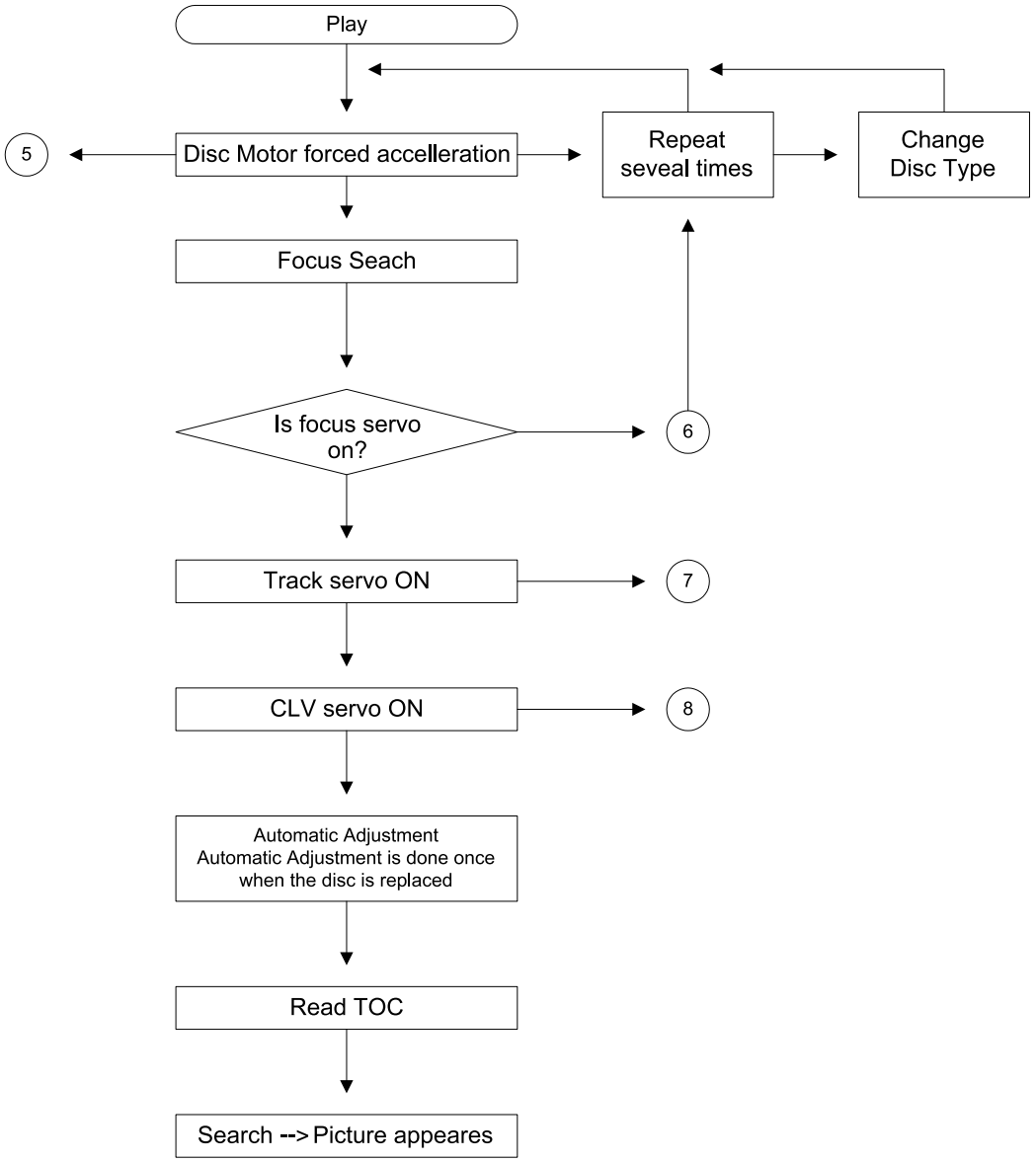
CD disc
Detetion waveform



V : 1V/div
H : 5ns/div

Fig. 1-4

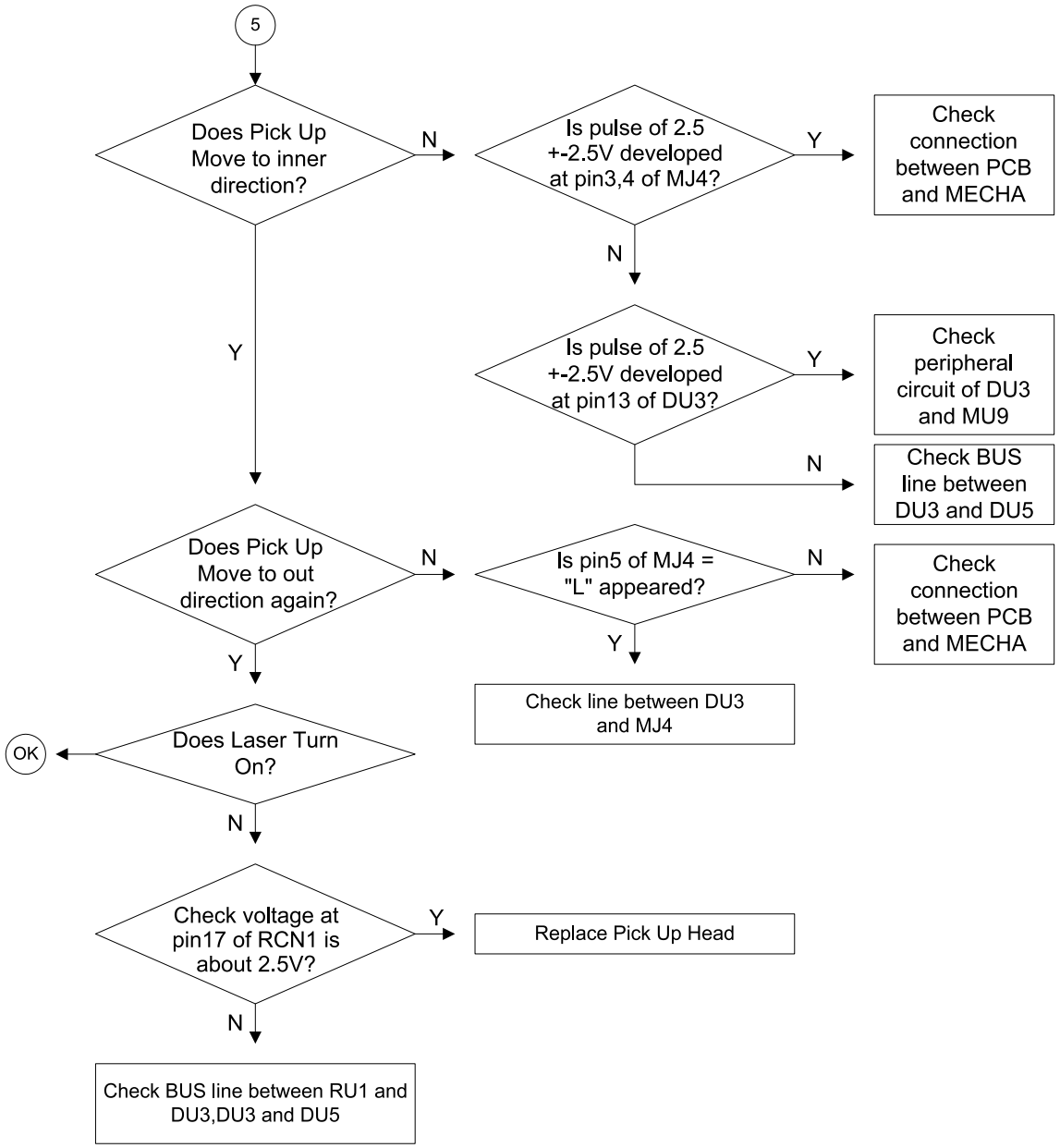
2. Play operation



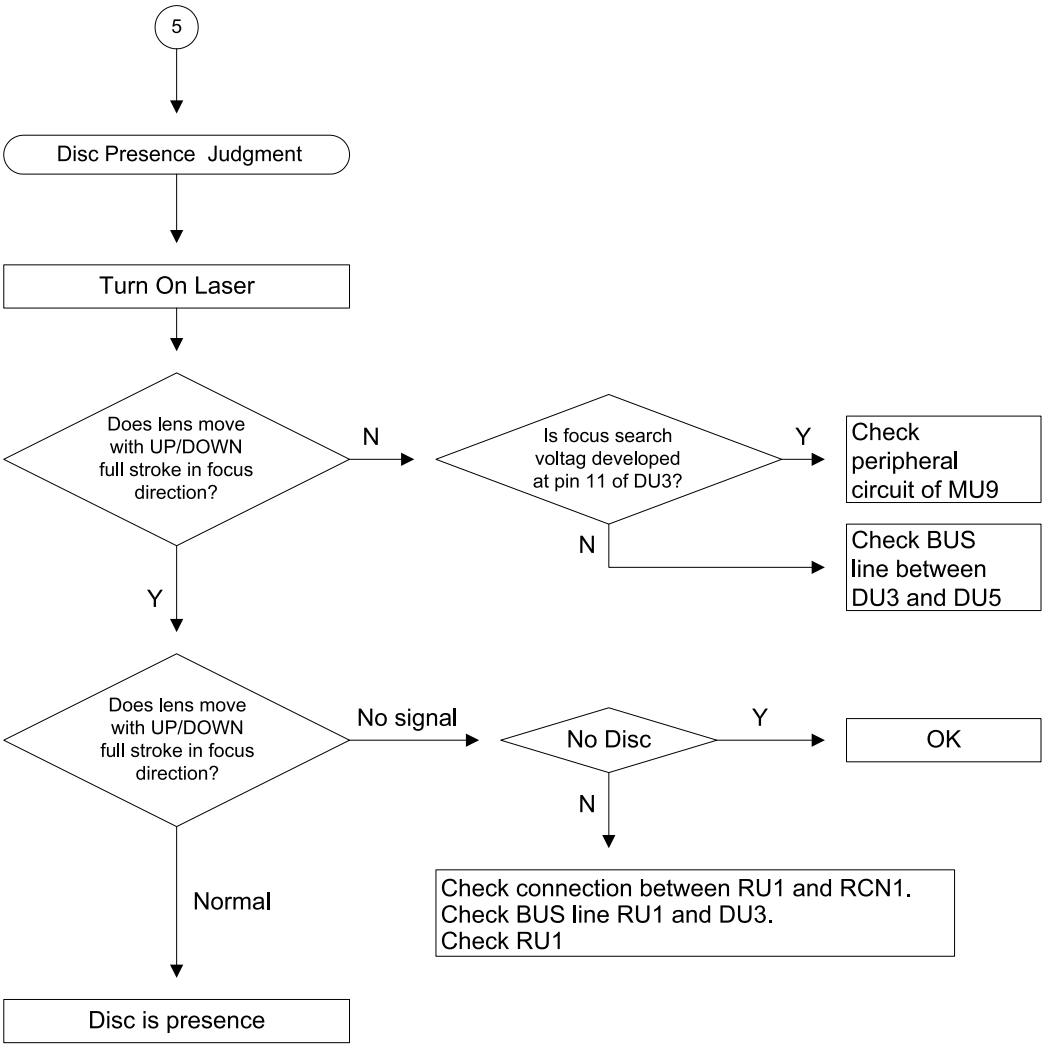
3. PickUp Head Initial Postion

PickUp Head Initial Postion

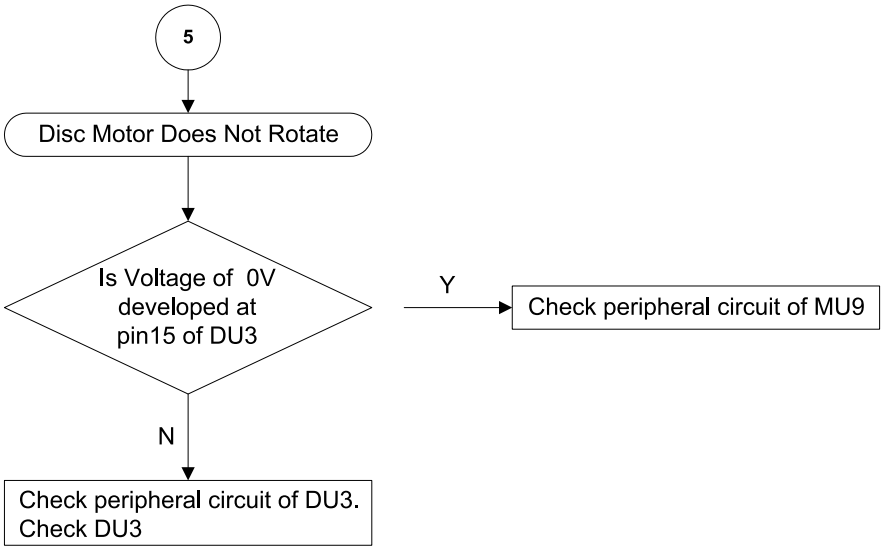
1. Move Pick Up Head to inner diretion until pin5 of MJ4="L"
2. If pin5 of MJ4="L", then move Pick Up Head to outer diretion for a short time.
3. Ture On the Laser of Pick Up Head to judge that disc is presence or not.


5
Does Pick Up Move to inner direction?
N
Is pulse of 2.5 +-2.5V developed at pin3,4 of MJ4?
Y
Check connection between PCB and MECHA
N
Y
Is pulse of 2.5 +-2.5V developed at pin13 of DU3?
Y
Check peripheral circuit of DU3 and MU9
N
Check BUS line between DU3 and DU5
Does Pick Up Move to out direction again?
N
Is pin5 of MJ4 = "L" appeared?
N
Check connection between PCB and MECHA
Y
Y
Check line between DU3 and MJ4
OK
Does Laser Turn On?
N
Check voltage at pin17 of RCN1 is about 2.5V?
Y
Replace Pick Up Head
N
Check BUS line between RU1 and DU3,DU3 and DU5

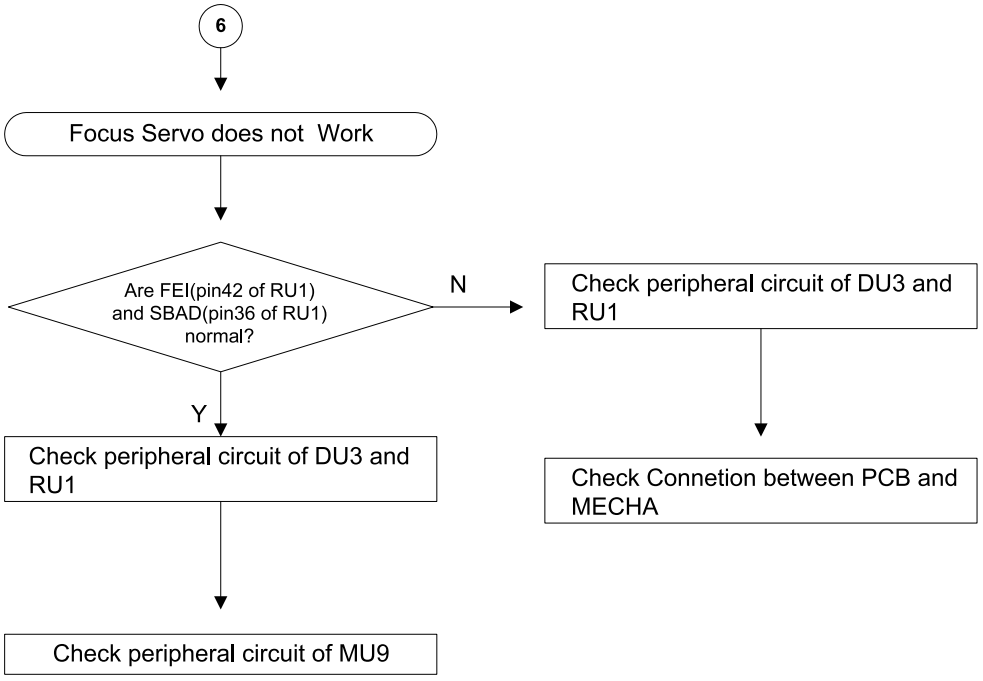
4. Disc Presence/Absense Judgment

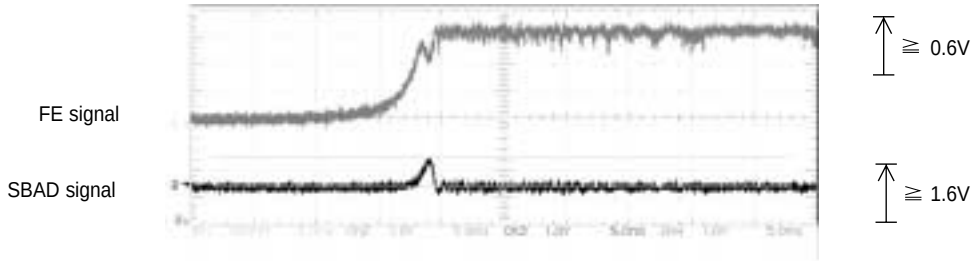


5. Disc Motor Does Not Rotate

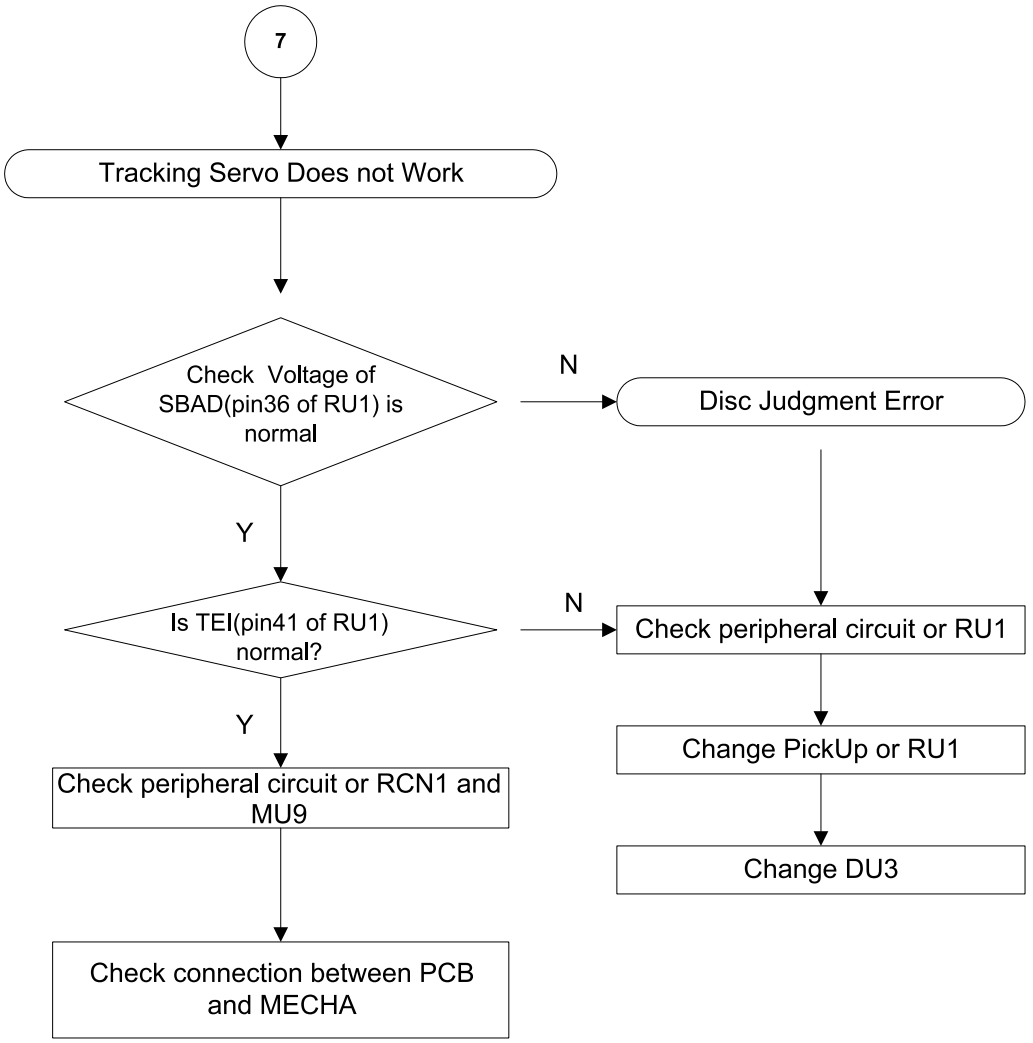

5
Disc Motor Does Not Rotate
Is Voltage of 0V developed at pin15 of DU3
Y
Check peripheral circuit of MU9
N
Check peripheral circuit of DU3. Check DU3

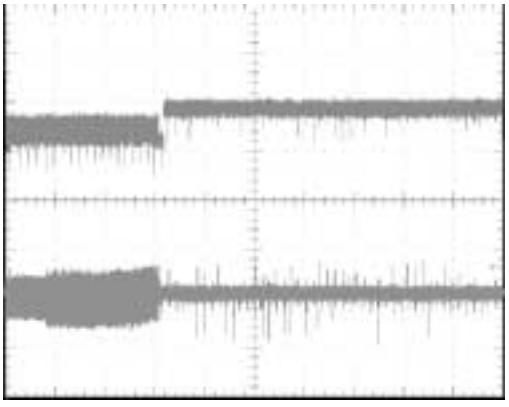
6. Focus Servo does not Work


6
Focus Servo does not Work
Are FEI(pin42 of RU1) and SBAD(pin36 of RU1) normal?
N
Check peripheral circuit of DU3 and RU1
Check Connetion between PCB and MECHA
Y
Check peripheral circuit of DU3 and RU1
Check peripheral circuit of MU9



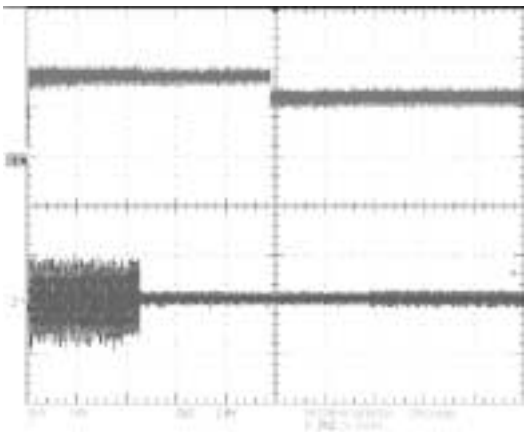
7. Tracking Servo Does Not Work



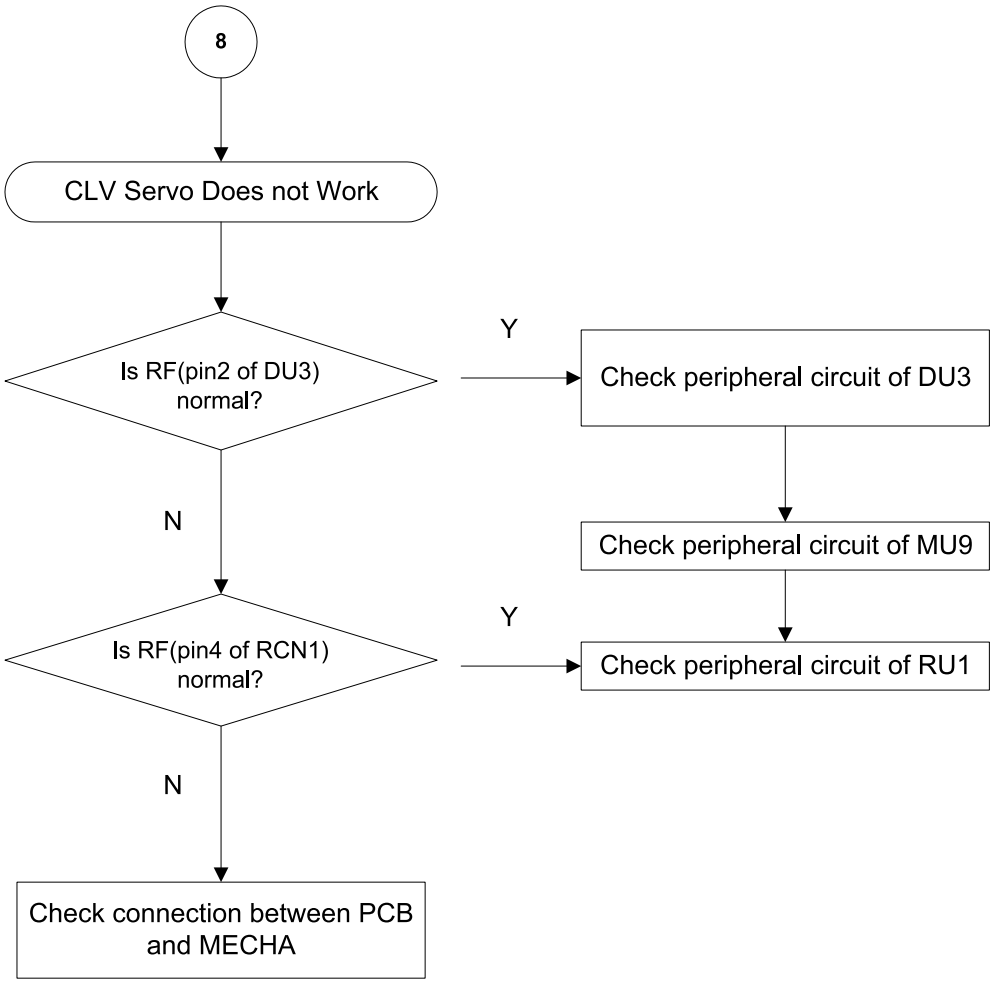


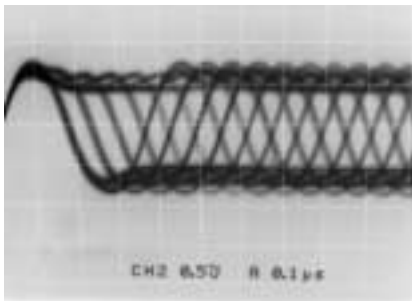
TE signal

RFRP signal

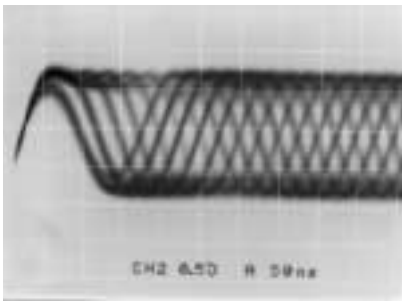


8. CLV Servo Does Not Work

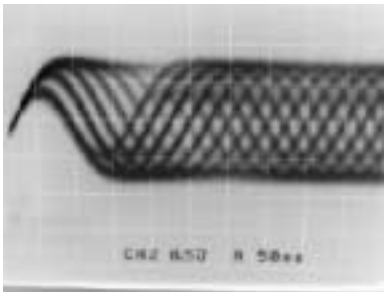




V : 500mV/div
H : 100ns/div

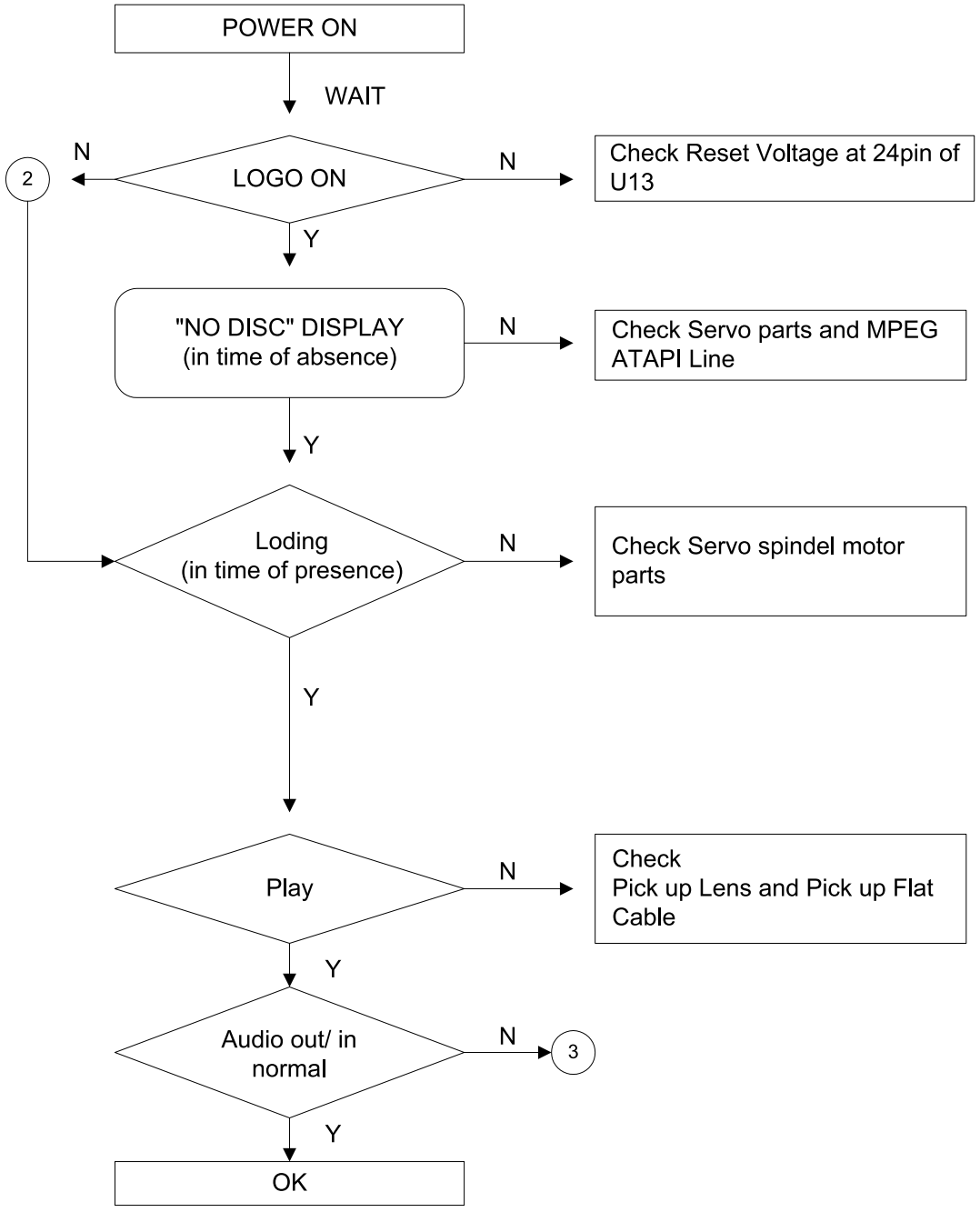


V : 500mV/div
H : 50ns/div

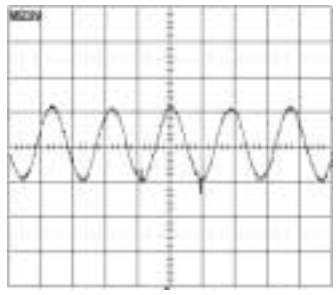


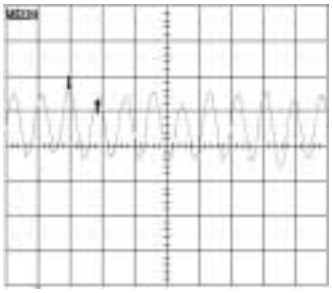
V : 500mV/div
H : 50ns/div

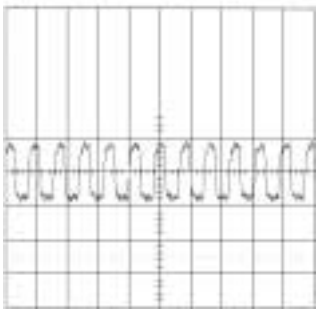
1. Initial operation after NO

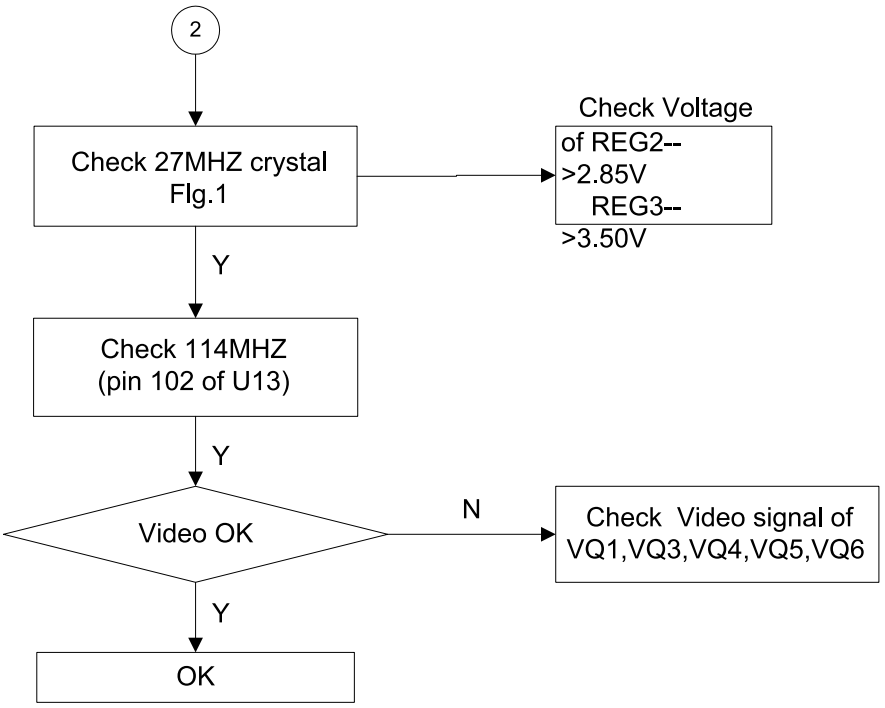


2. Logo operation

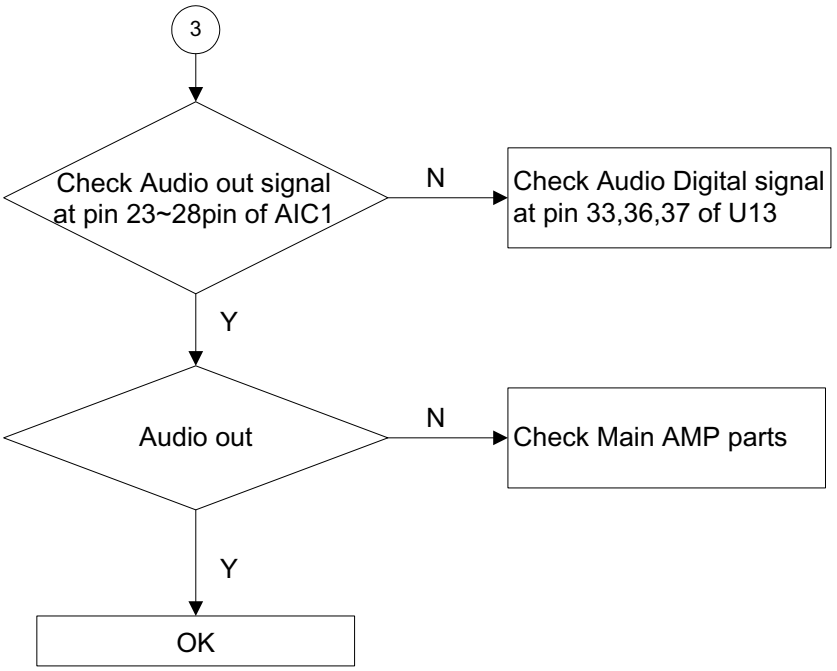




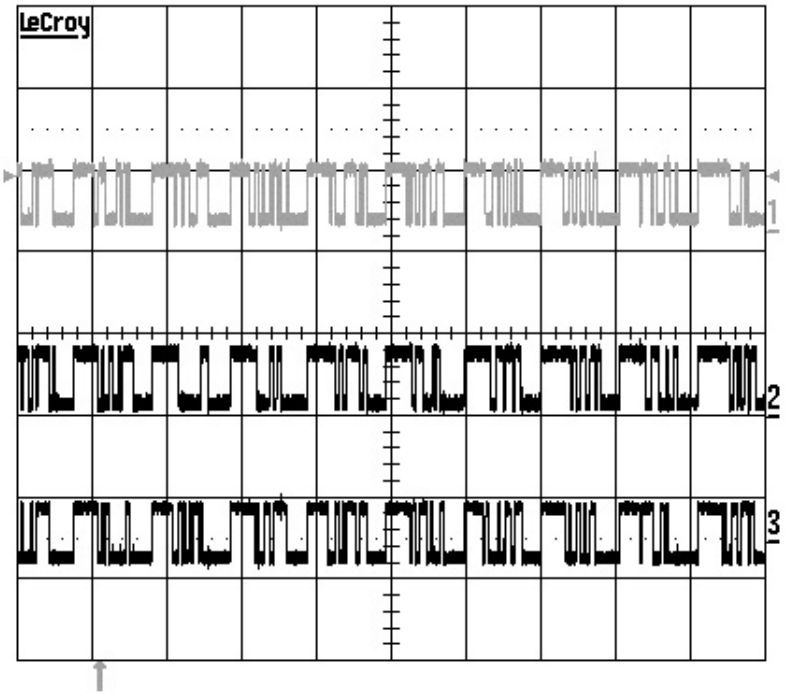




3.Audio operation



Audio Digital Signal



TOSHIBA CORPORATION
1-1, SHIBAURA 1- CHOME, MINATO - KU, TOKYO 105 - 8001, JAPAN

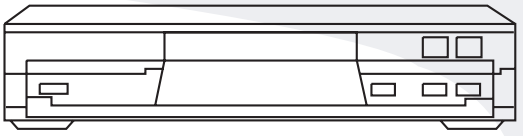
TOSHIBA

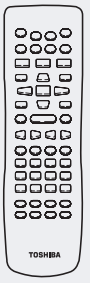
FILE NO. 810-200310X

SERVICE MANUAL

DVD HOME THEATER SYSTEM

SD-43HKSB
SD-43HKSE

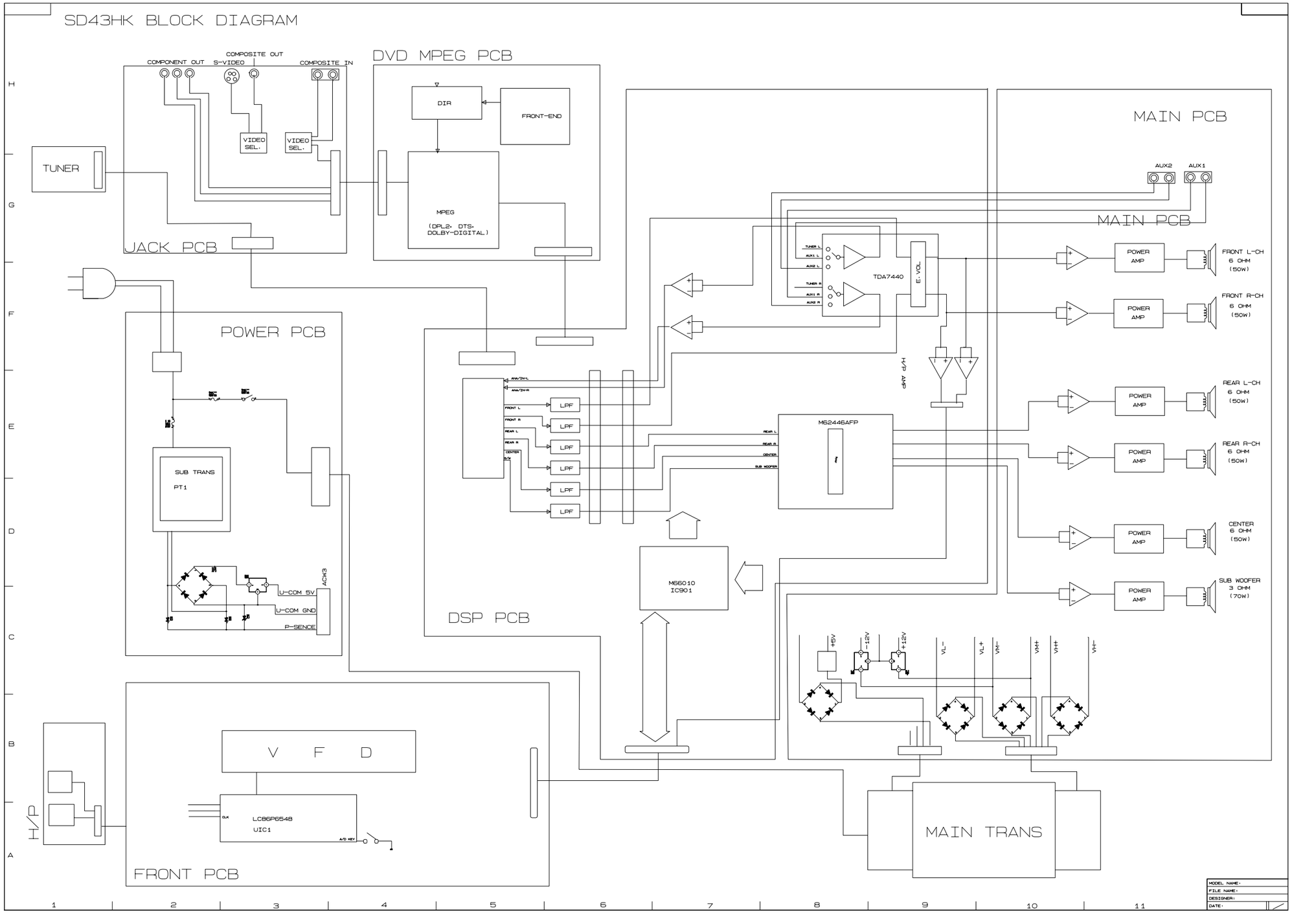




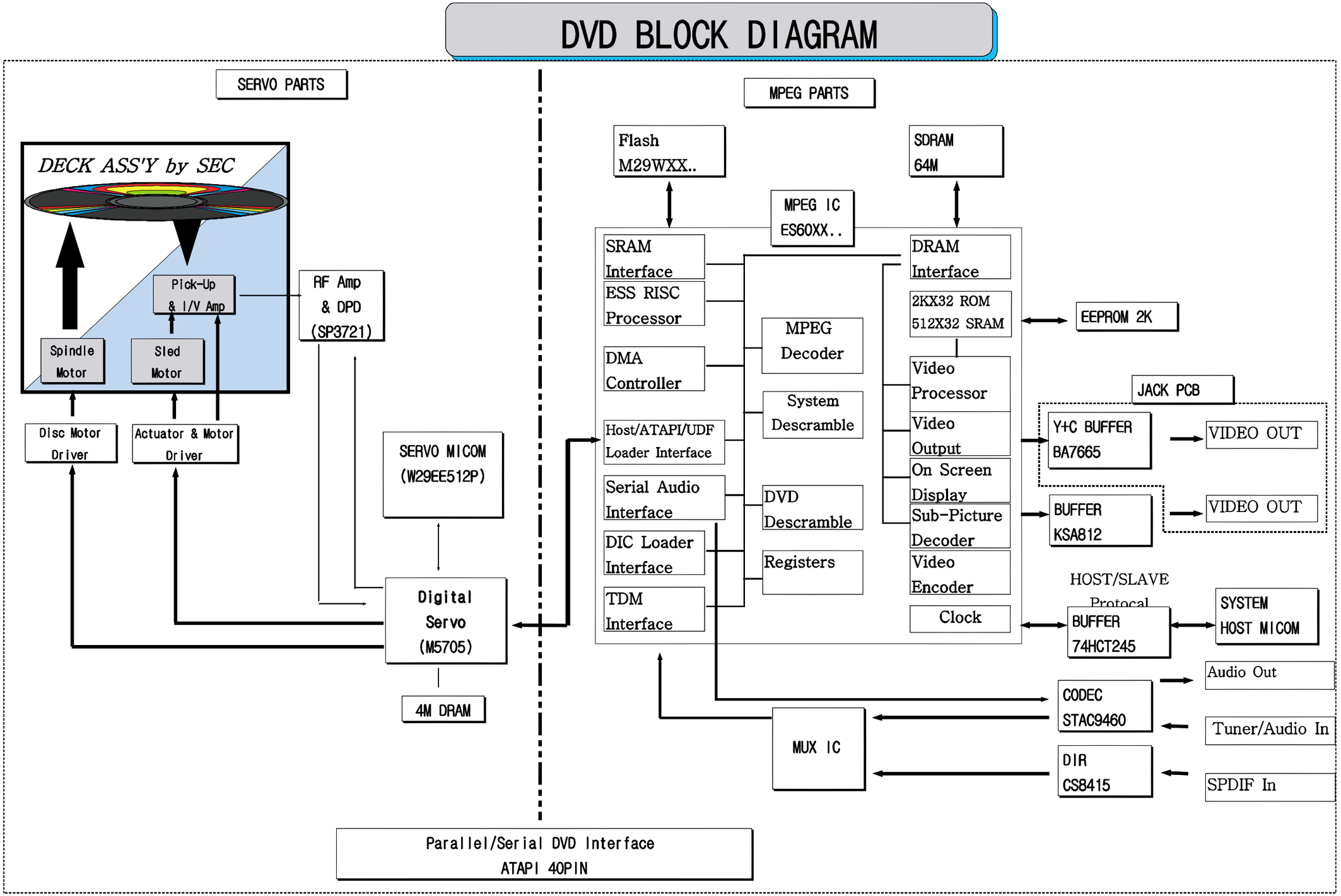
April. 2003

5. Block Diagram

5-1 MAIN Part

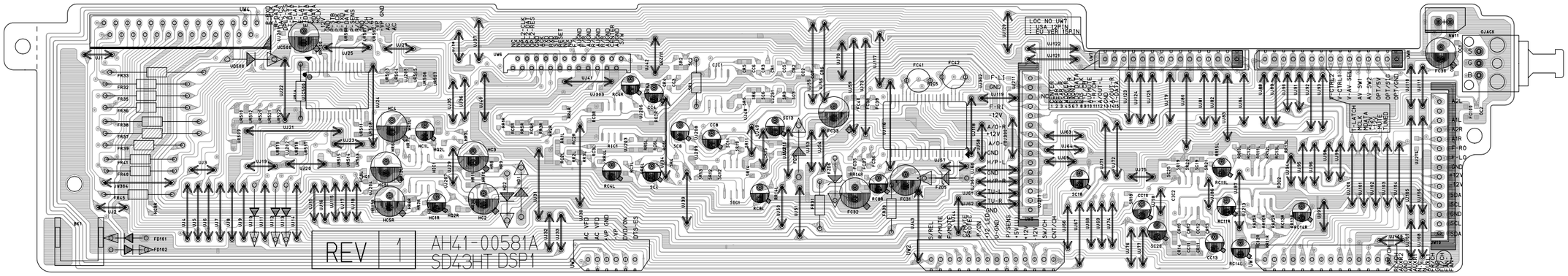


DVD BLOCK DIAGRAM

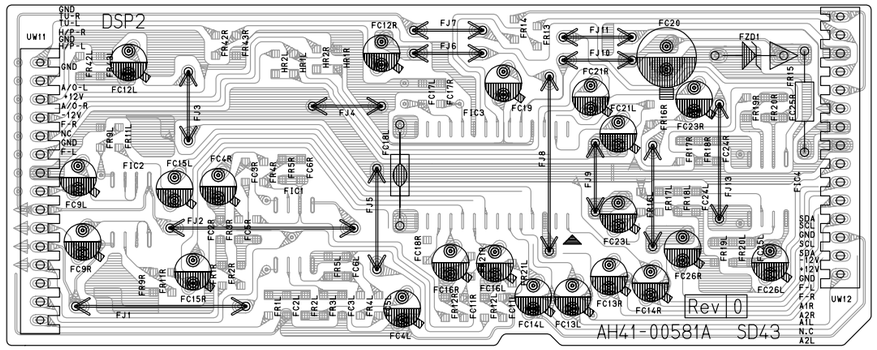


6. Printed Circuit Board Diagram

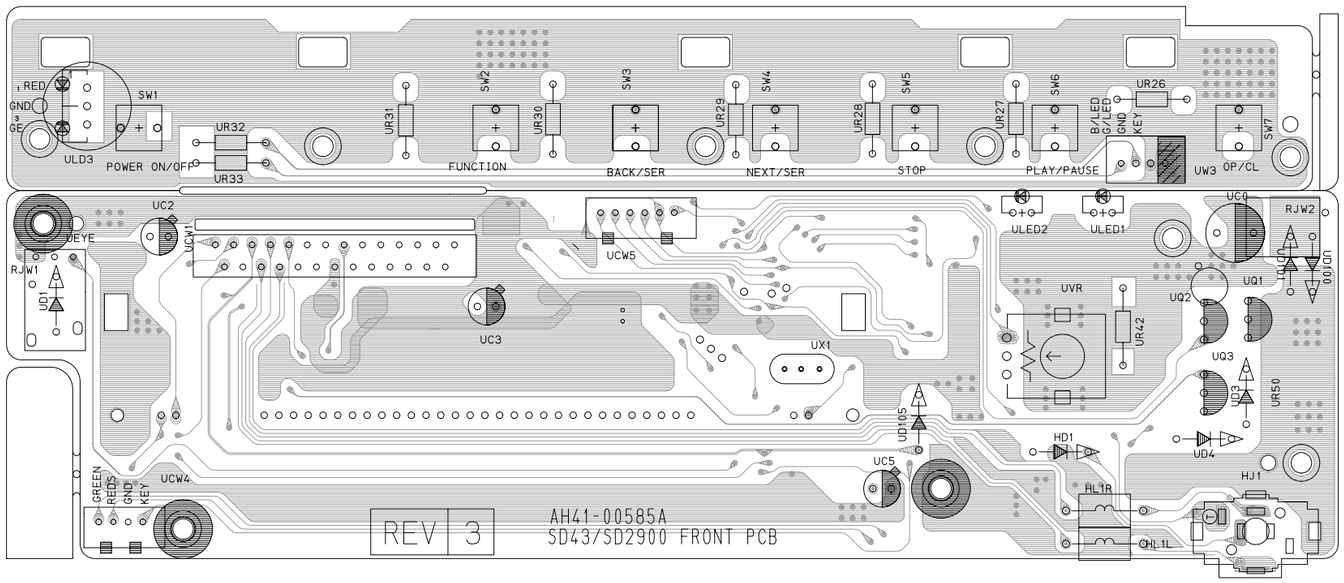
6-1 DSP1



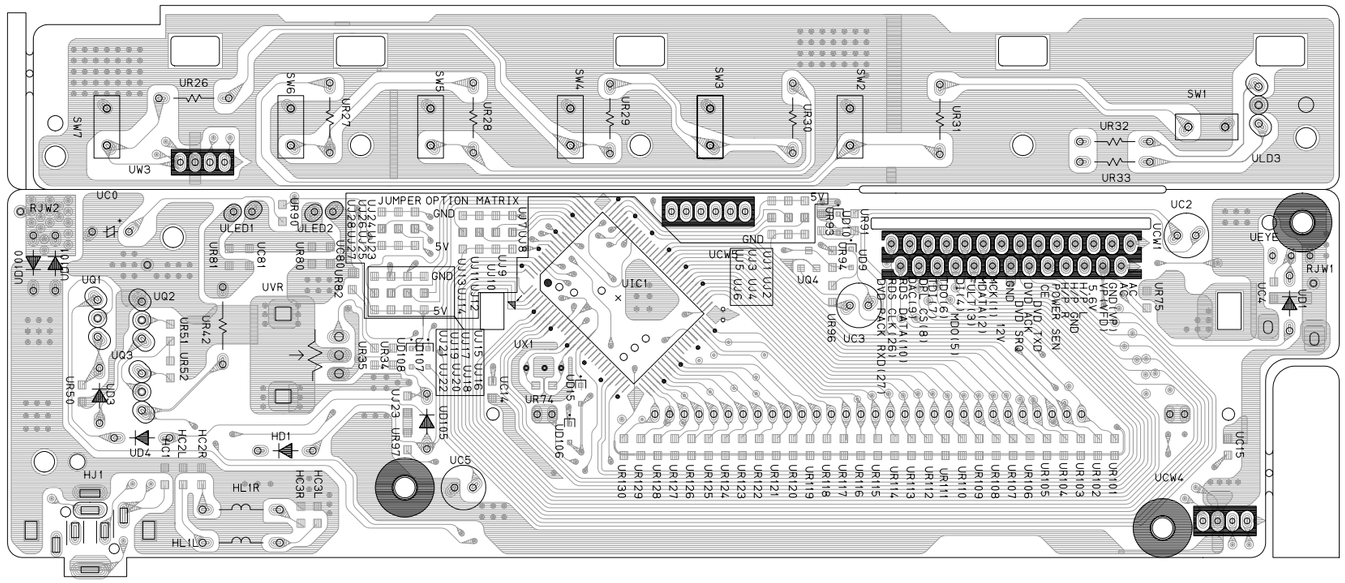
6-2 DSP2



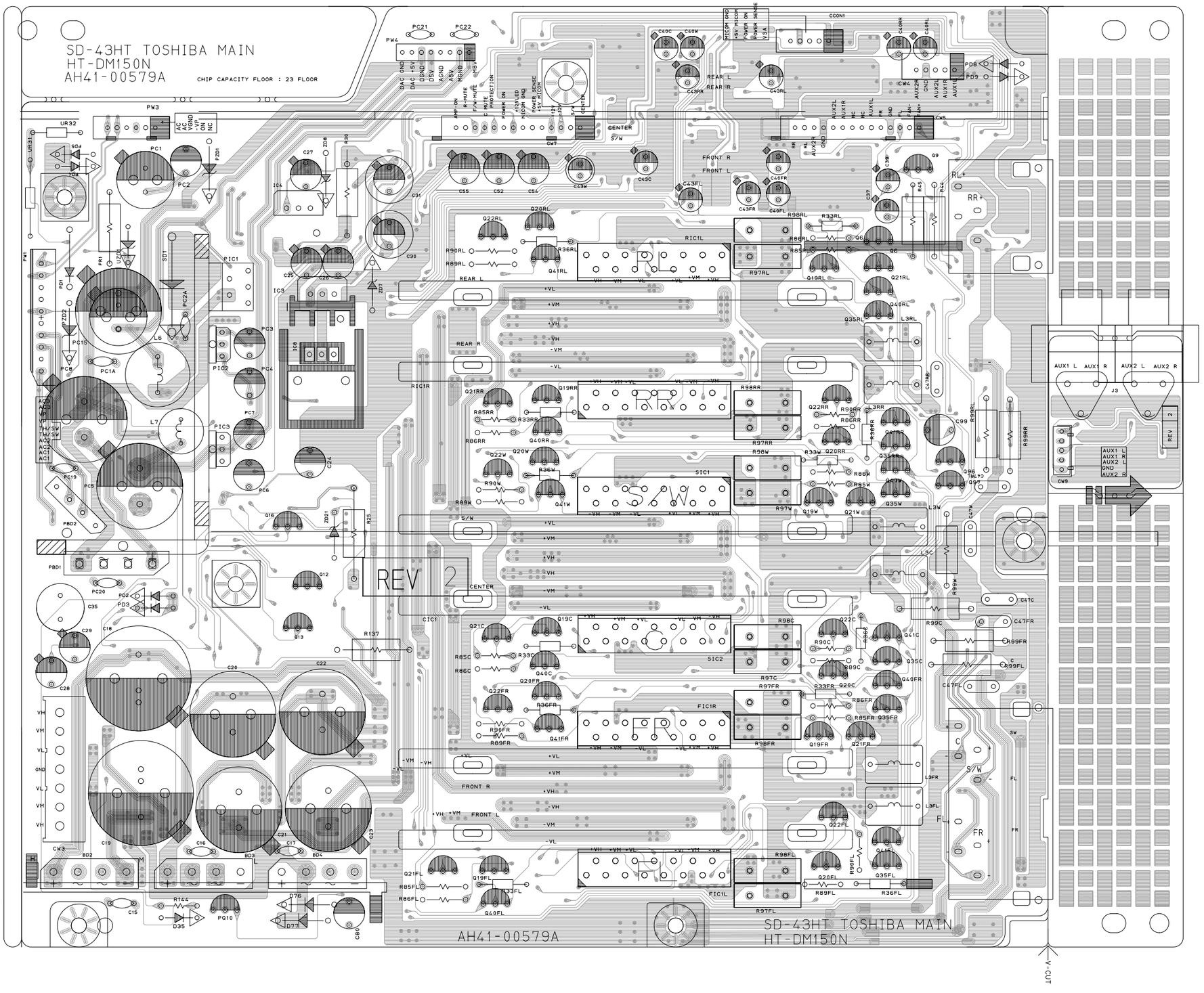
* TOP VIEW

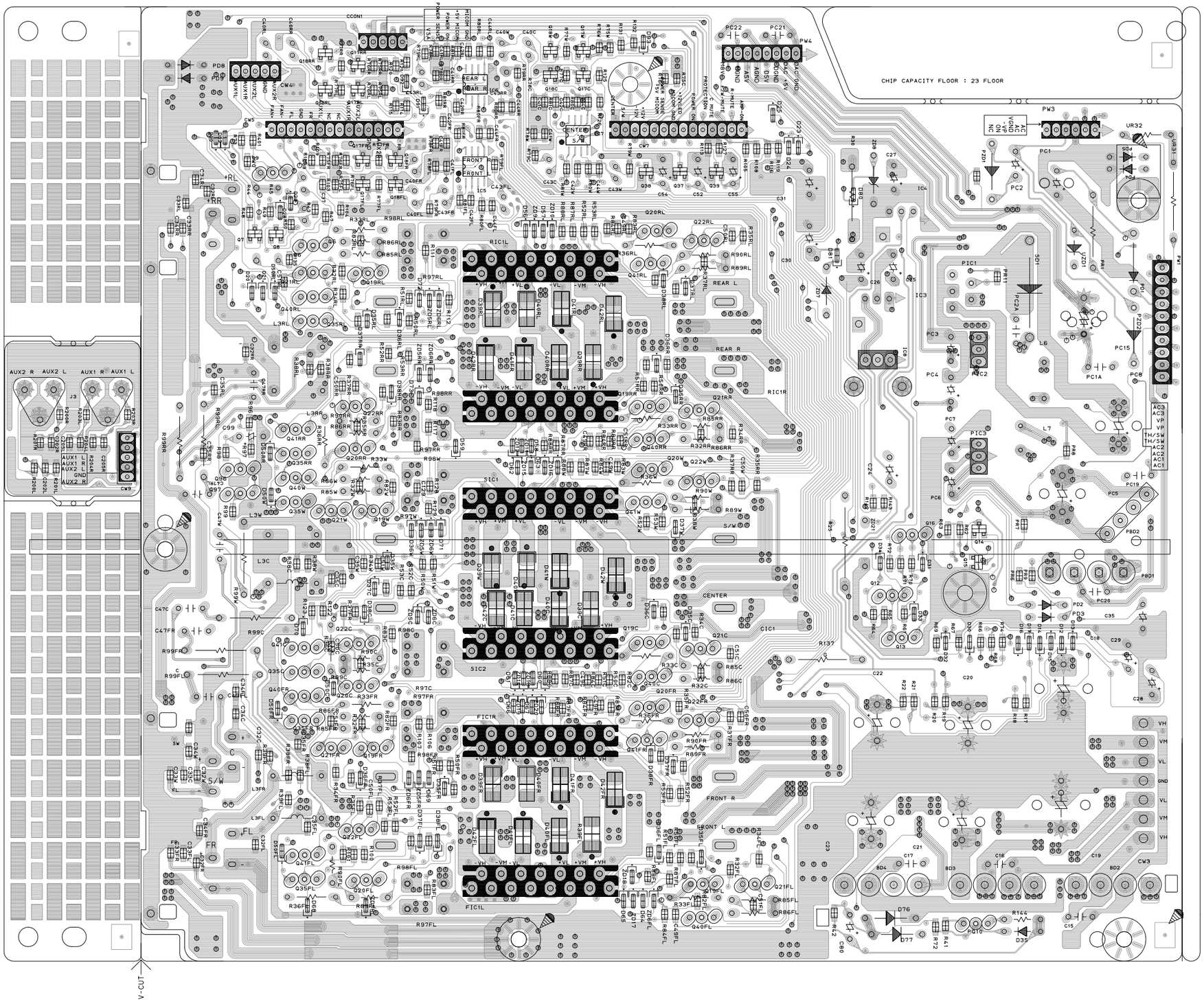


* BOTTOM VIEW

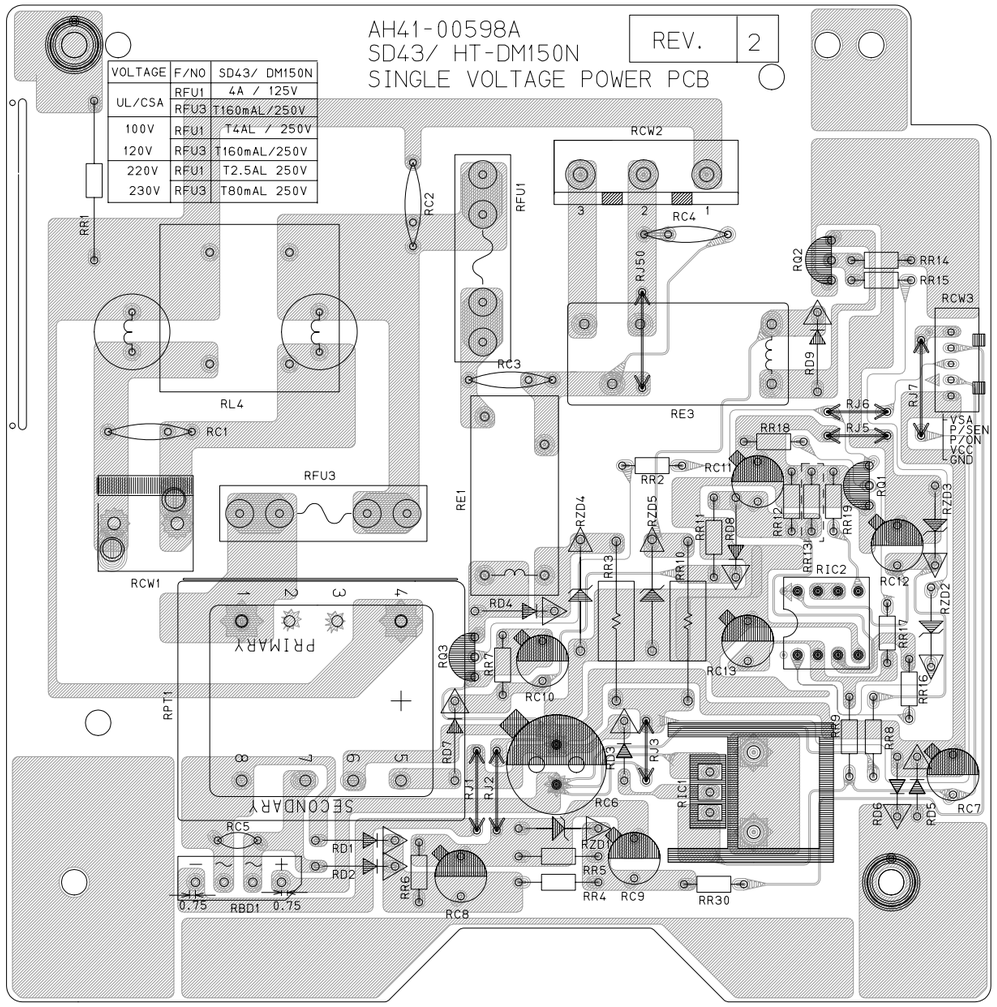


6-4-1 MAIN (TOP VIEW)

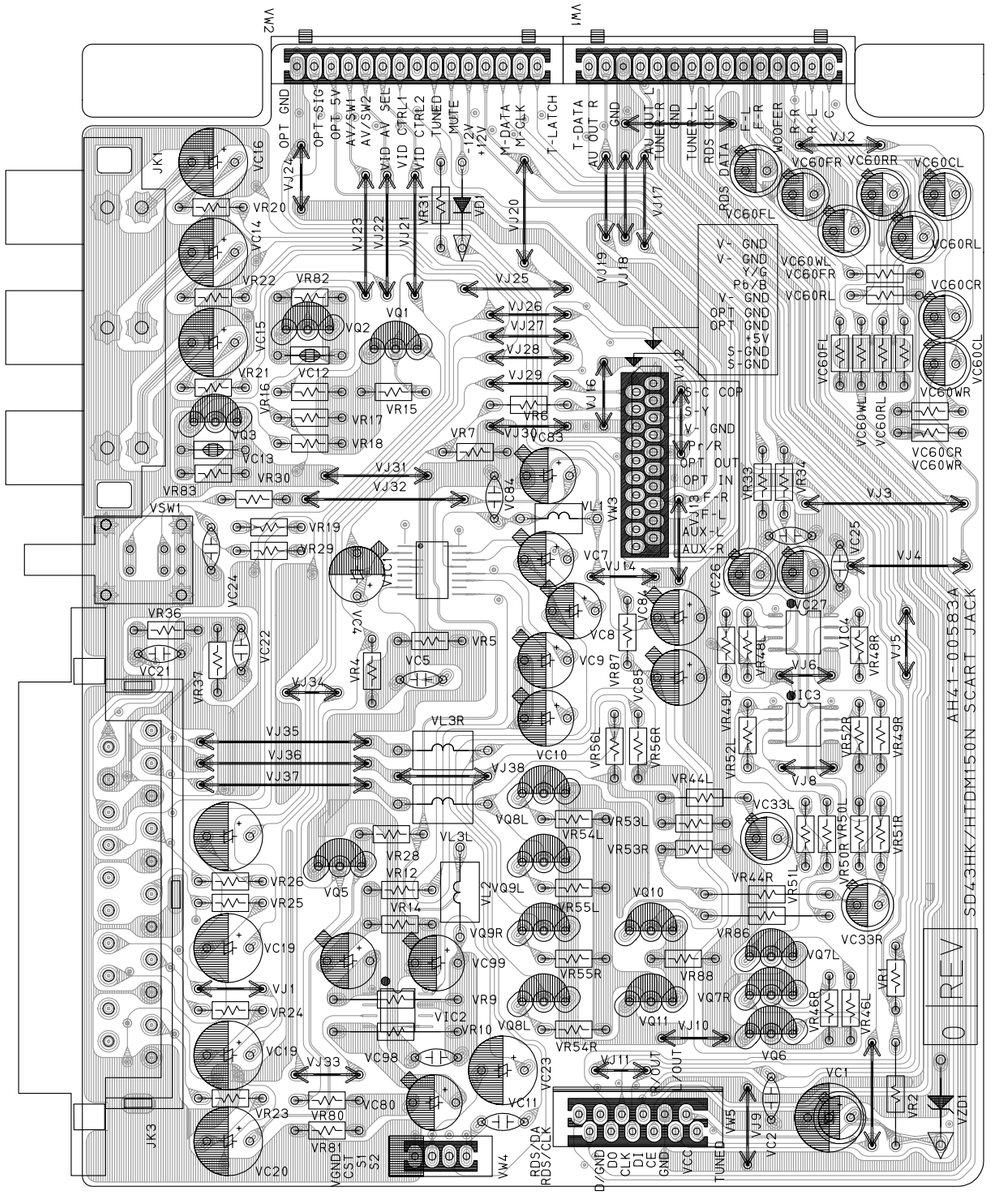



CHIP CAPACITY FLOOR : 23 FLOOR
REAR L
REAR R
FRONT L
FRONT R
CENTER
AUX2 R AUX2 L AUX1 R AUX1 L
V-OUT

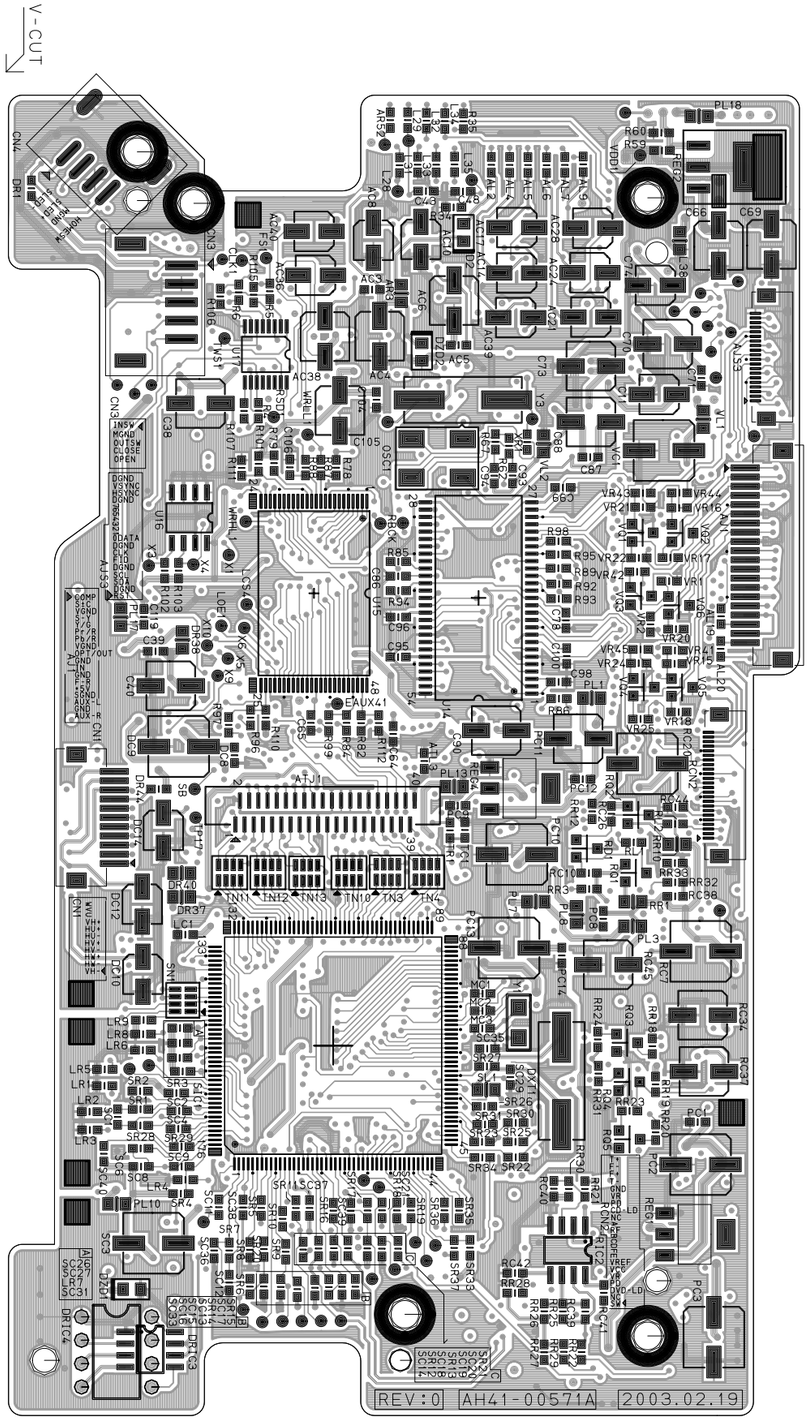
6-5 POWER



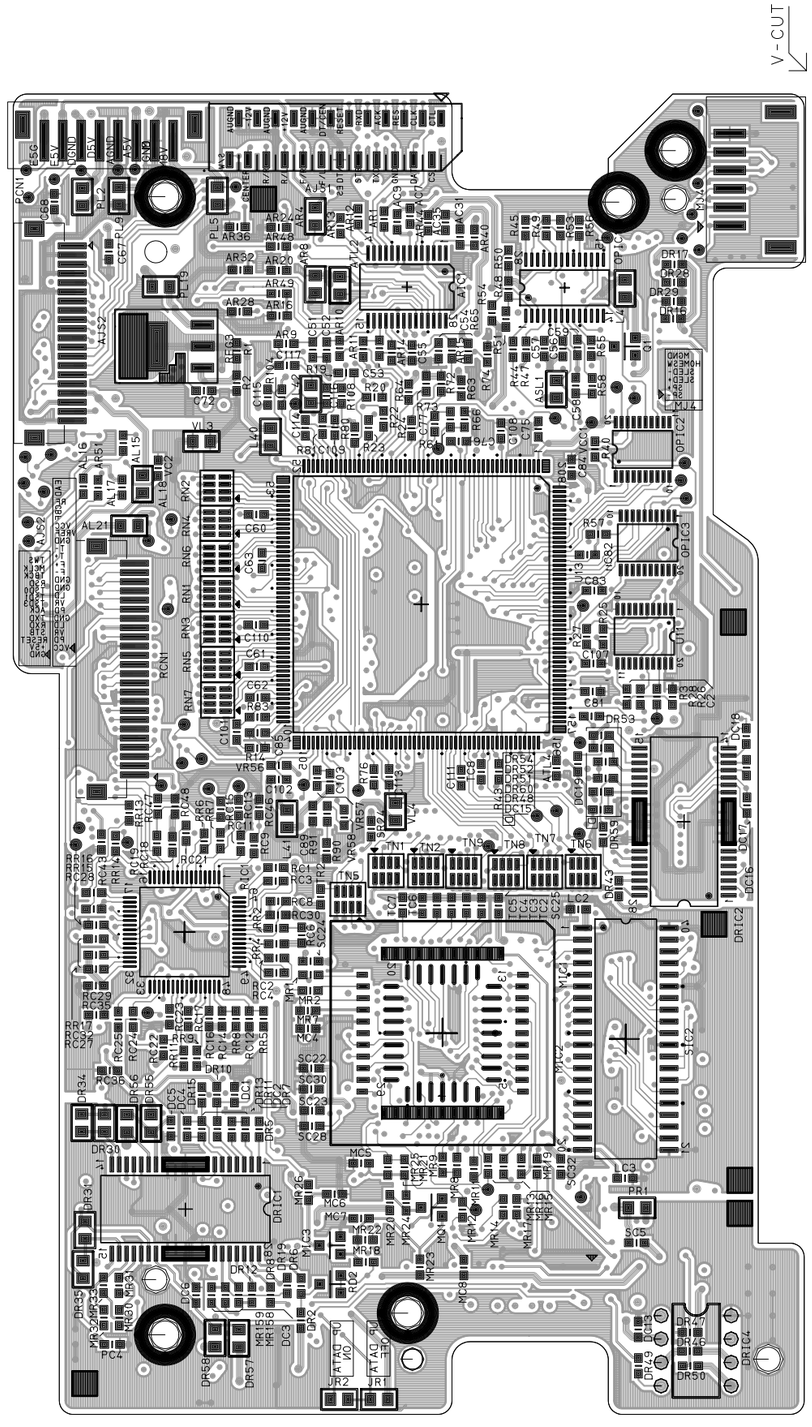
6-6 JACK (SCART)



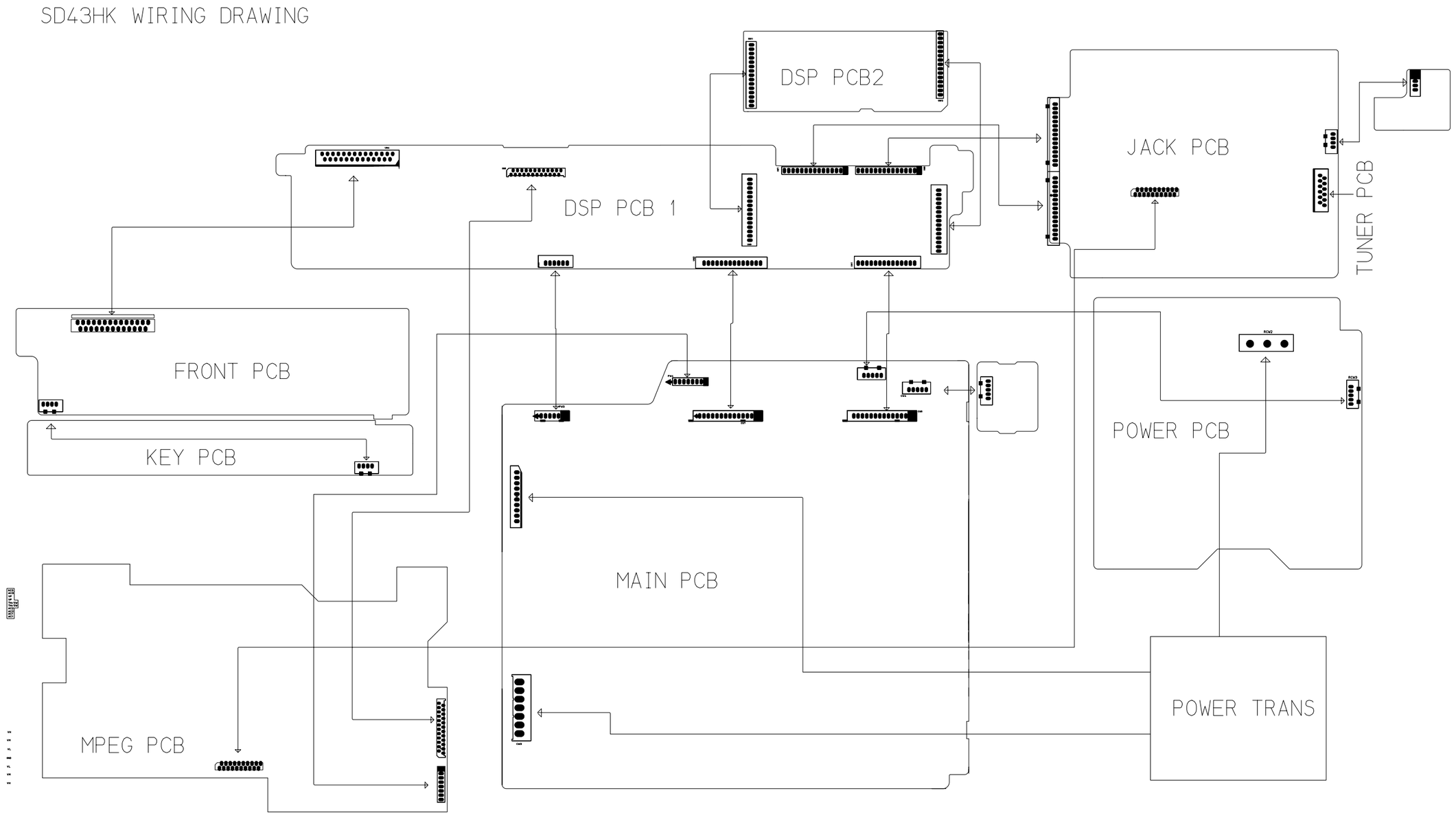
* TOP VIEW



* BOTTOM VIEW

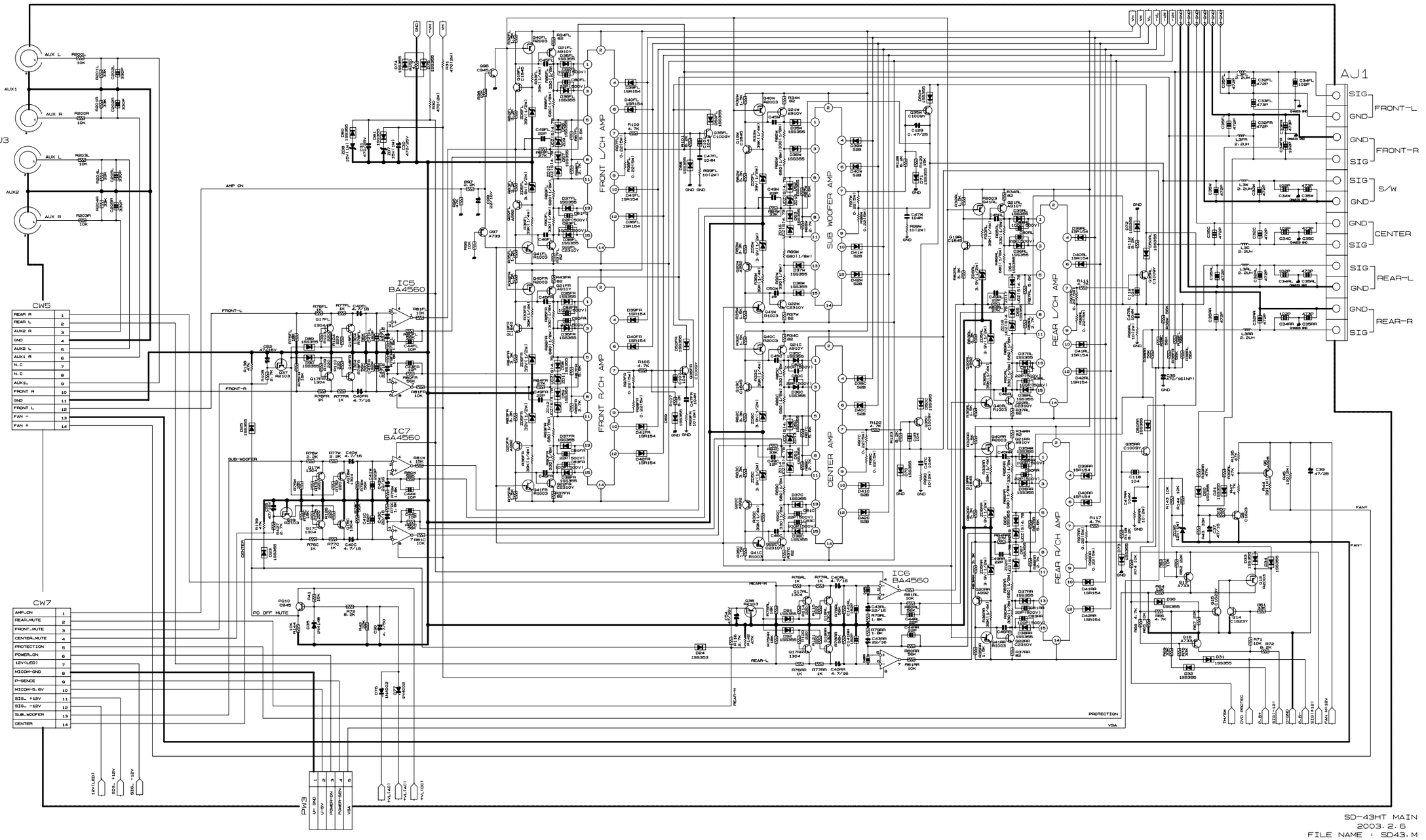


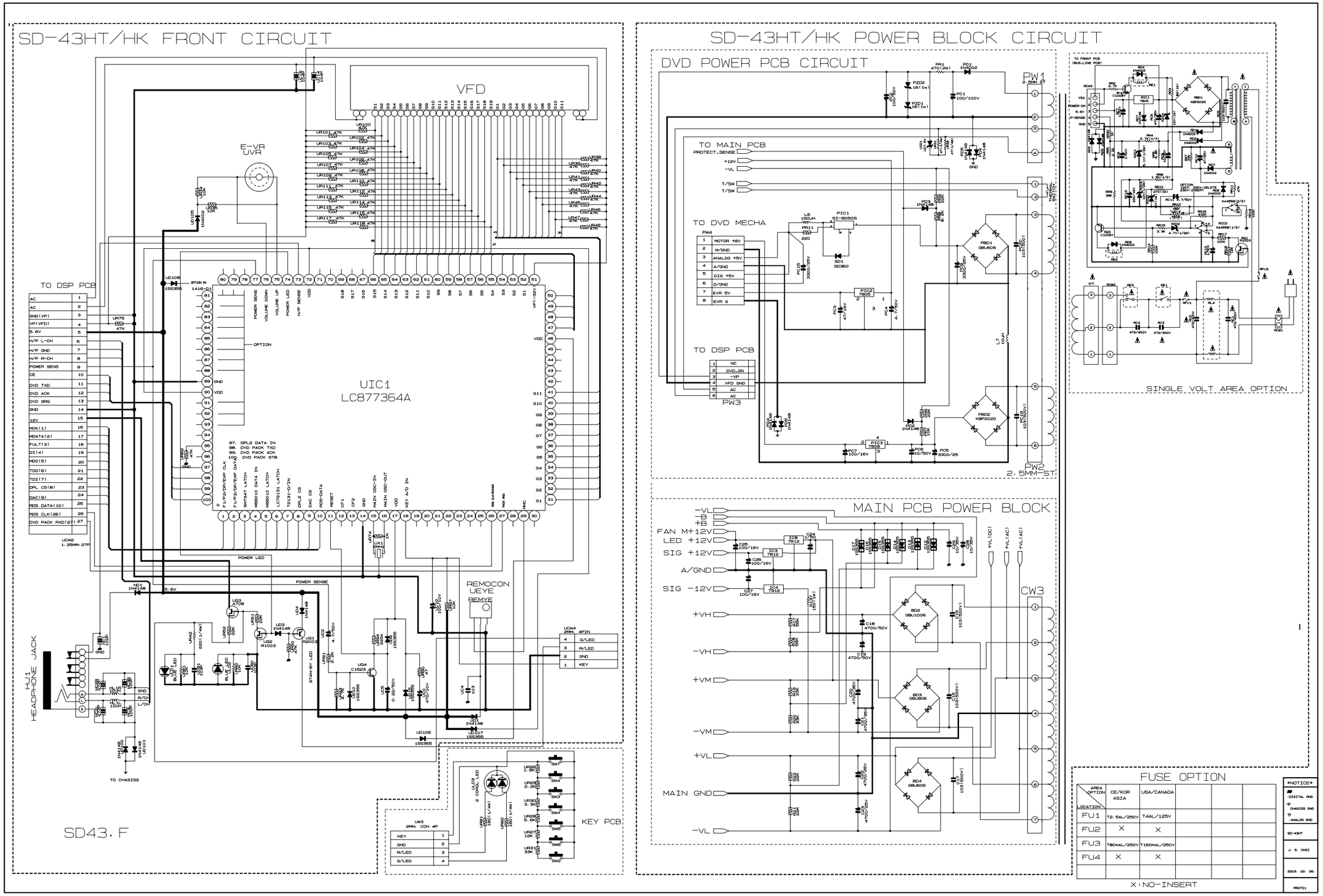
7. Wiring Diagram

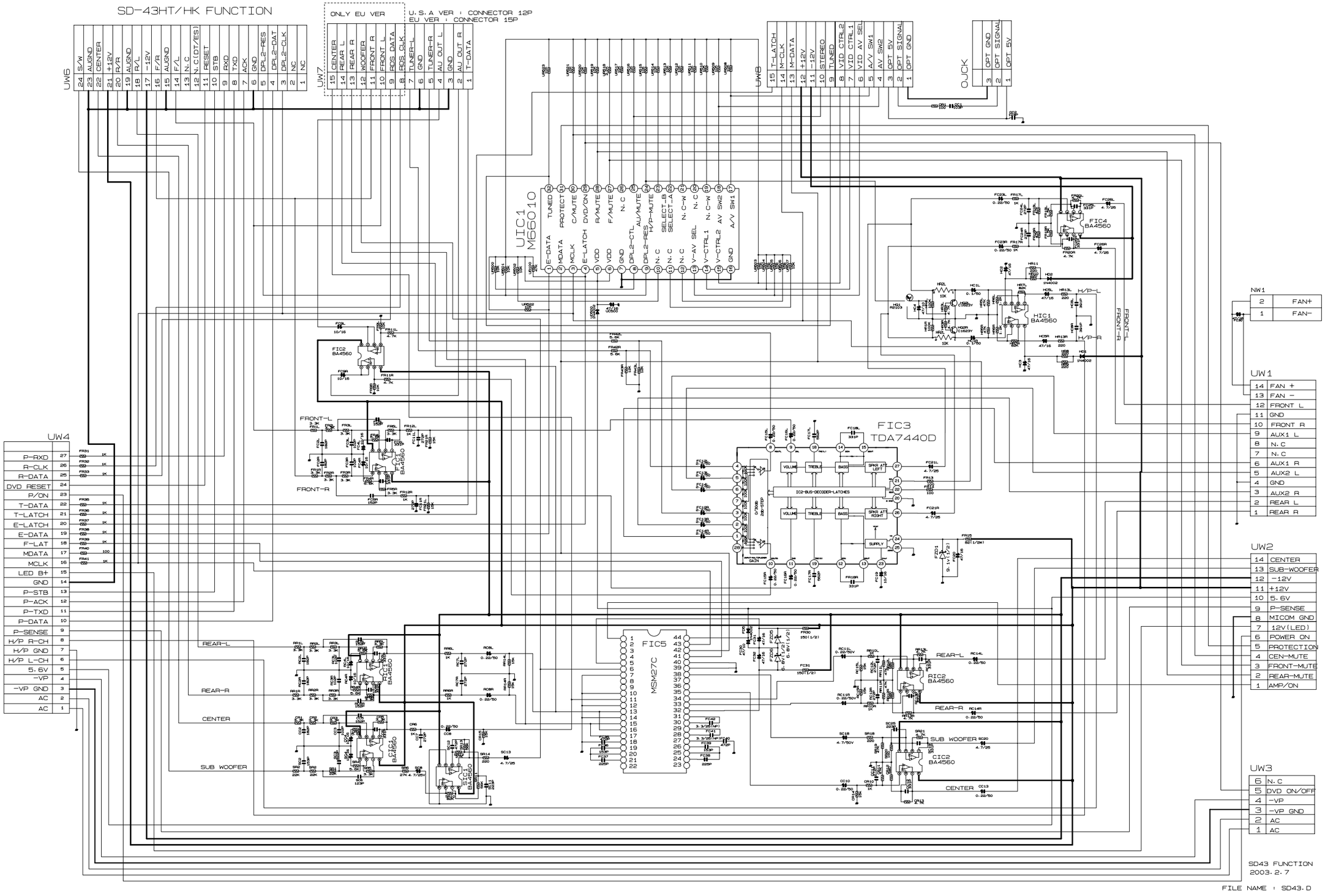


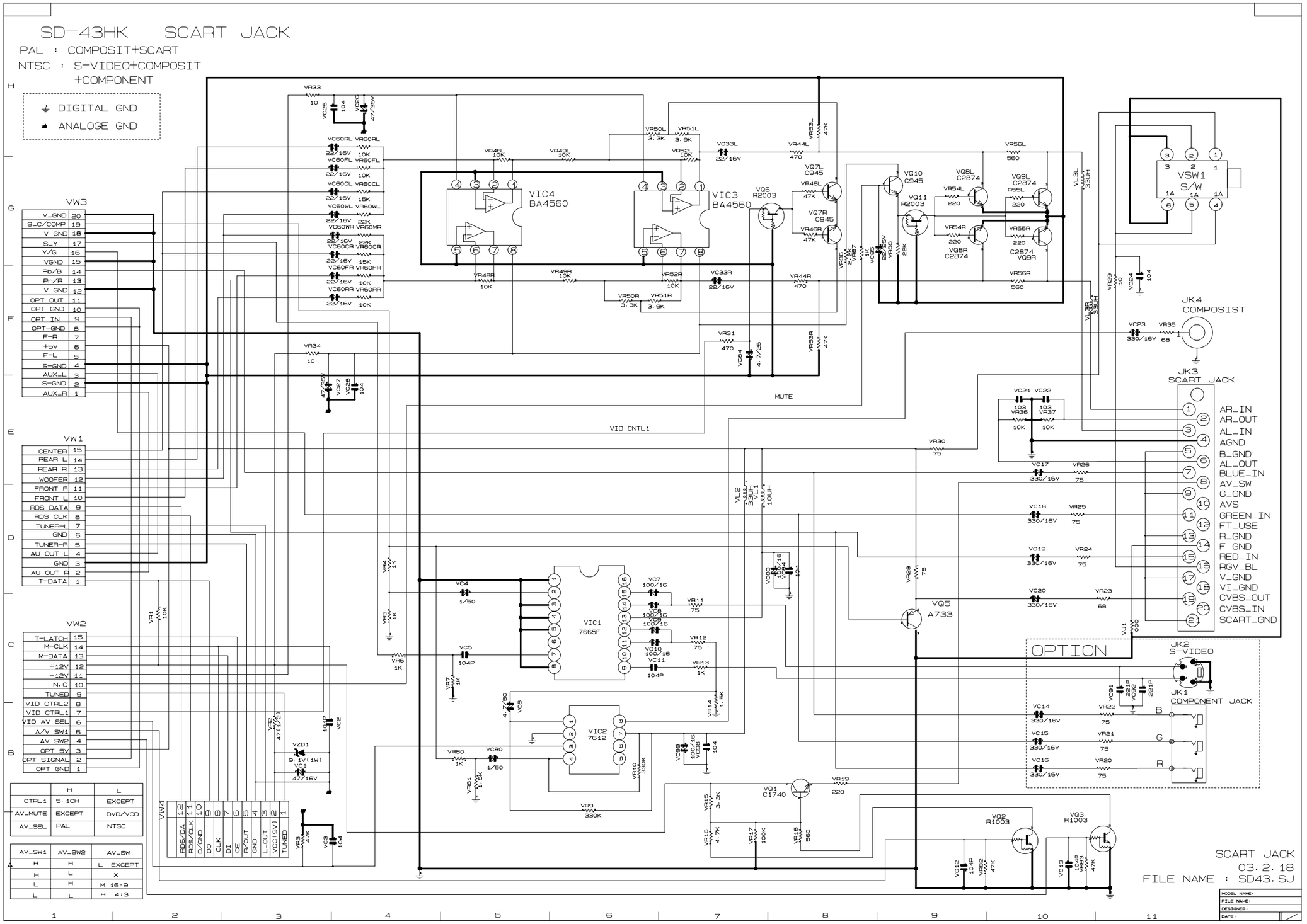
8. Schematic Diagram

8-1 MAIN



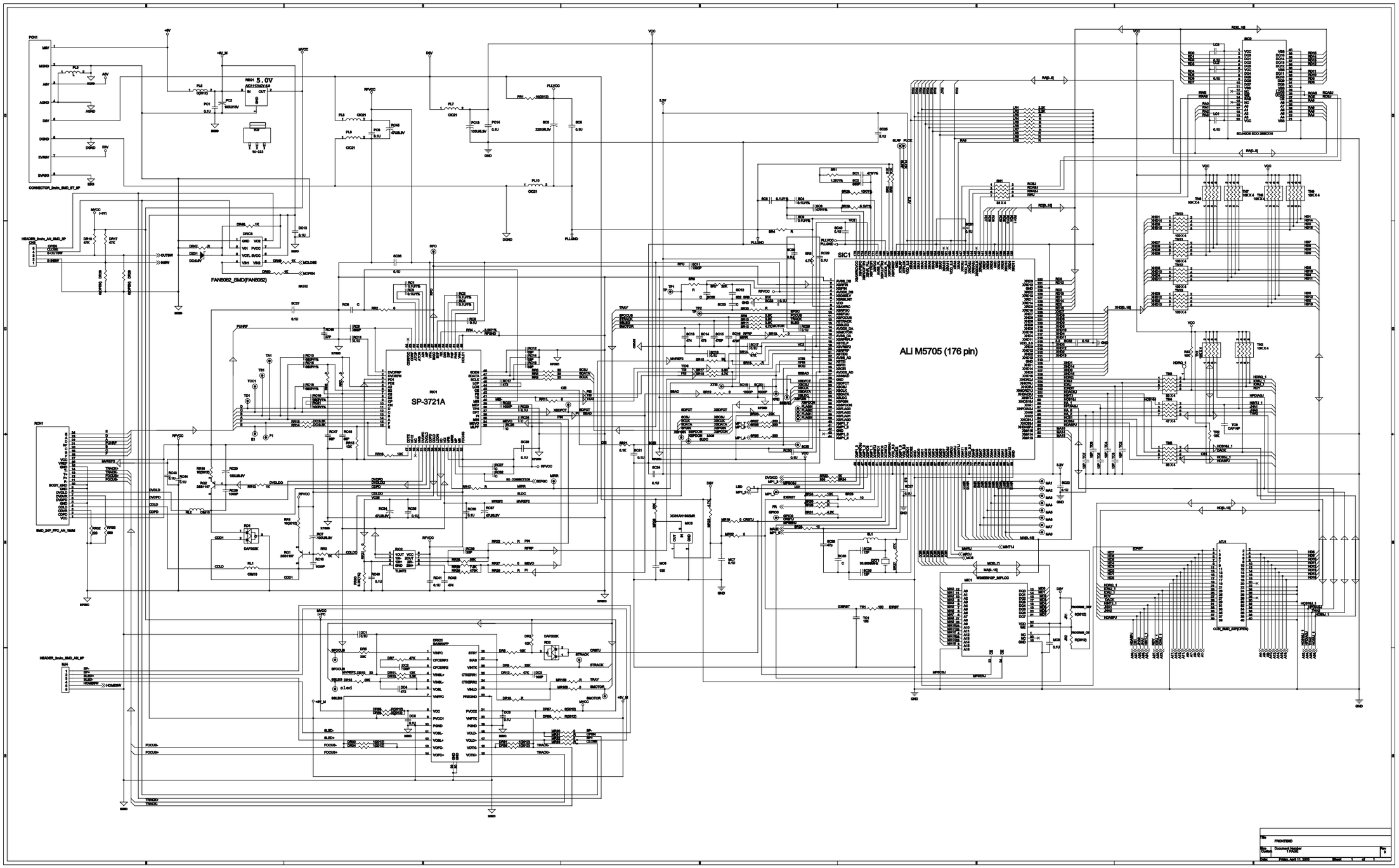

SD-43HT/HK FRONT CIRCUIT
VFD
E-VR
UVR
TO DSP PCB
UIC1
LC877364A
OPTION
POWER SENS
VOLUME DOWN
VOLUME UP
POWER LED
H/P SENSE
VDD
GND
POWER LED
POWER SENSE
5.6V
REMOCON
UEYE
REMYE
HEADPHONE JACK
HJ1
TO CHASSIS
KEY PCB
SD43.F
SD-43HT/HK POWER BLOCK CIRCUIT
DVD POWER PCB CIRCUIT
TO MAIN PCB
PROTECT_SENSE
+12V
-VL
T/SW
T/SW
TO DVD MECHA
MOTOR +8V
M/GND
ANALOG +5V
A/GND
DIG +5V
D/GND
EVR 5V
EVR G
TO DSP PCB
NC
DVD_ON
-VP
VFD GND
AC
AC
PW1
2.5MM-ST
PW2
2.5MM-ST
PW3
SINGLE VOLT AREA OPTION
MAIN PCB POWER BLOCK
-VL
-B
+B
FAN M+12V
LED +12V
SIG +12V
A/GND
SIG -12V
+VH
-VH
+VM
-VM
+VL
MAIN GND
-VL
CW3
FUSE OPTION
AREA OPTION
LOCATION
CE/KOR ASIA
USA/CANADA
FU1 T2.5AL/250V T4AL/125V
FU2 X X
FU3 T80mAL/250V T160mAL/250V
FU4 X X
X:NO-INSERT
NOTICE
DIGITAL GND
CHASSIS GND
ANALOG GND
SD-43HT
2003. 02. 06.
PRG701

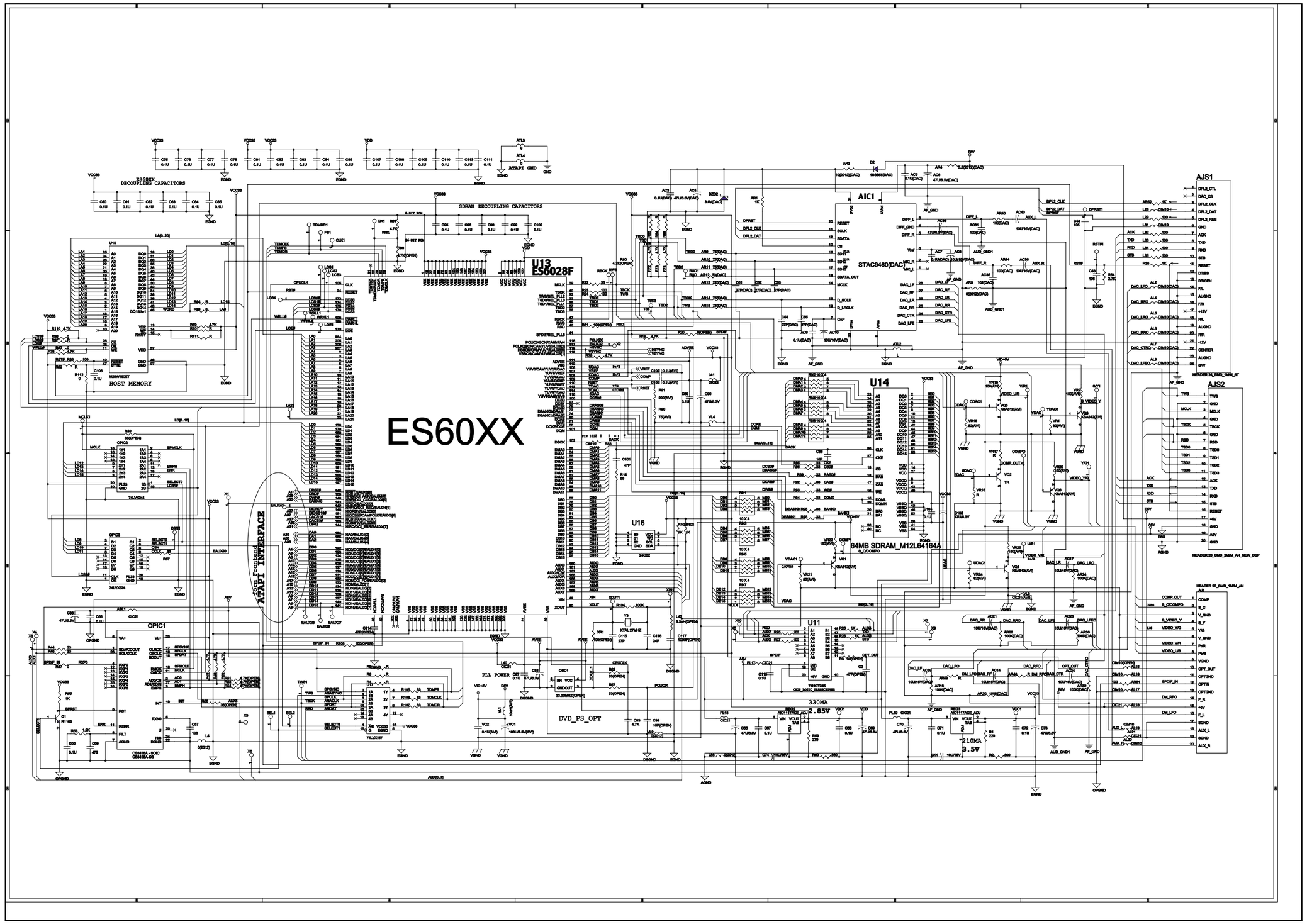

SD-43HT/HK FUNCTION
ONLY EU VER
U.S.A VER : CONNECTOR 12P
EU VER : CONNECTOR 15P
UW6
24 S/W
23 AUGND
22 CENTER
21 +12V
20 RA/R
19 AUGND
18 RA/L
17 -12V
16 F/R
15 AUGND
14 F/L
13 N.C
12 N.C(DT/ES)
11 RESET
10 STB
9 RXD
8 TXD
7 ACK
6 GND
5 DPL2-RES
4 DPL2-DAT
3 DPL2-CLK
2 NC
1 NC
UW7
15 CENTER
14 REAR L
13 REAR R
12 WOOFER
11 FRONT R
10 FRONT L
9 RDS DATA
8 RDS CLK
7 TUNER-L
6 GND
5 TUNER-R
4 AU OUT L
3 GND
2 AU OUT R
1 T-DATA
UW8
15 T-LATCH
14 M-CLK
13 M-DATA
12 +12V
11 -12V
10 STEREO
9 TUNED
8 VID CTRL2
7 VID CTRL1
6 VID AV SEL
5 A/V SW1
4 AV SW2
3 OPT 5V
2 OPT SIGNAL
1 OPT GND
QUCK
3 OPT GND
2 OPT SIGNAL
1 OPT 5V
UIC1
M66010
TUNED
PROTECT
C/MUTE
DVD/ON
R/MUTE
F/MUTE
N.C
AU/MUTE
DPL2-RES
H/P-MUTE
N.C
SELECT_B
SELECT_A
N.C-W
N.C
N.C-W
N.C
V-AV SEL
N.C
V-CTRL1
V-CTRL2
AV SW2
A/V SW1
E-DATA
MDATA
MCLK
E-LATCH
VDD
VDD
GND
DPL2-CTL
N.C
N.C
N.C
V-AV SEL
V-CTRL1
V-CTRL2
GND
FIC1
BA4560
FIC2
BA4560
FIC3
TDA7440D
IIC-BUS-DECODER-LATCHES
VOLUME
TREBLE
BASS
SPKR ATT LEFT
SPKR ATT RIGHT
SUPPLY
INPUT GAIN
FIC4
BA4560
HIC1
BA4560
HIC2
BA4560
CIC1
BA4560
CIC2
BA4560
FIC5
MSM27C
FRONT-L
FRONT-R
REAR-L
REAR-R
CENTER
SUB WOOFER
H/P-L
H/P-R
UW4
P-RXD 27
R-CLK 26
R-DATA 25
DVD RESET 24
P/ON 23
T-DATA 22
T-LATCH 21
E-LATCH 20
E-DATA 19
F-LAT 18
MDATA 17
MCLK 16
LED B+ 15
GND 14
P-STB 13
P-ACK 12
P-TXD 11
P-DATA 10
P-SENSE 9
H/P R-CH 8
H/P GND 7
H/P L-CH 6
5.6V 5
-VP 4
-VP GND 3
AC 2
AC 1
NW1
2 FAN+
1 FAN-
UW1
14 FAN +
13 FAN -
12 FRONT L
11 GND
10 FRONT R
9 AUX1 L
8 N.C
7 N.C
6 AUX1 R
5 AUX2 L
4 GND
3 AUX2 R
2 REAR L
1 REAR R
UW2
14 CENTER
13 SUB-WOOFER
12 -12V
11 +12V
10 5.6V
9 P-SENSE
8 MICOM GND
7 12V(LED)
6 POWER ON
5 PROTECTION
4 CEN-MUTE
3 FRONT-MUTE
2 REAR-MUTE
1 AMP/ON
UW3
6 N.C
5 DVD ON/OFF
4 -VP
3 -VP GND
2 AC
1 AC
SD43 FUNCTION
2003.2.7
FILE NAME : SD43.D



	H	L
CTRL1	5.1CH	EXCEPT
AV_MUTE	EXCEPT	DVD/VCD
AV_SEL	PAL	NTSC

AV_SW1	AV_SW2	AV_SW
H	H	L EXCEPT
H	L	X
L	H	M 16:9
L	L	H 4:3


ALi M5705 (176 pin)
SP-3721A
SIC1
RIC1
FAN8082_SMD(FAN8052)
CONNECTOR_3mm_SMD_ST_SP
HEADER_3mm_AH_SMD_SP
SMD_24P_FPC_AH_1MM
HEADER_3mm_SMD_AH_SP
SDRAM_16M
BOARDS EEO 2M8CG19
MSB1T1J
MSB1T1J_16
MSB1281SP_80PLCC
FRONTEND


ES60XX
U13
ES6028F
AIC1
STAC9460(DAC)
U14
U16
U11
OPIC1
HOST MEMORY
SDRAM DECOUPLING CAPACITORS
ES60XX DECOUPLING CAPACITORS
64MB SDRAM_M12L64164A
PLL POWER
DVD_PS_OPT
330MA
2.85V
210MA
3.5V
AJS1
AJS2
HEADER 34_SMD_1MM_ST
HEADER 20_SMD_2MM_AH_NEW_DSP
HEADER 30_SMD_1MM_AH
ATAPI INTERFACE
Com.Frontend

TOSHIBA CORPORATION
1-1, SHIBAURA 1- CHOME, MINATO - KU, TOKYO 105 - 8001, JAPAN